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# Revision of the trigonopoid *Platynotina* from South Africa. Part IV. Genus *Atrocrates* Koch, 1956 (Coleoptera: Tenebrionidae: Platynotini)

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ABSTRACT. The genus Atrocrates Koch of the trigonopoid Platynotina is revised (type species: Trigonopus platyderus Mulsant et Rey, 1853). Seventeen new species are described: Atrocrates bredasdorpensis, A. capensis, A. dentatus, A. endrodyi, A. evestigator, A. formosus, A. garbarczyki, A. largus, A. libidinosus, A. metasimius, A. occultator, A. ordinarius, A. oweni, A. pliskoae, A. robustus, A. sinuosus and A. splendidus. Lectotypes are designated. Key for species determination are provided.

Key words: entomology, taxonomy, revision, Coleoptera, Tenebrionidae, Platynotini, Atrocrates, South Africa.

In his1956 paper Koch published a revision of the tribe *Platynotini* in which he described the genus *Atrocrates*. The author included the following species in this genus: *Platynotus striatus* Quensel, 1806, *Trigonopus platyderus* Mulsant et Rey, 1853 (type species), *T. latemarginatus* Mulsant et Rey, 1853, *T. marginatus* var. *simius* Mulsant et Rey, 1853 and three newly described ones - *bisinuatus*, *montiscedri* and *peringueyi*. Koch, in the same paper, described *Melanopterus podagricus*, also belonging to the genus *Atrocrates* – according to the present interpretation of the genera *Atrocrates* Koch and *Melanopterus* Mulsant et Rey (Iwan 1997).

### ACKNOWLEDGEMENTS AND DEPOSITORIES OF THE MATERIAL EXAMINED

I am grateful to the following curators and institutions for the loan of specimens used in this study:

HNHM - Hungarian Natural History Museum, Budapest, Hungary (O. MERKL); JFC - Julio Ferrer Collection, Stockholm, Sweden (J. FERRER);

MHNG - Muséum d'Histoire Naturelle, Geneva, Switzerland (I. LÖBL);

MIZPAN - Museum and Institute of Zoology, Polish Academy of Sciences, Warsaw, Poland;

MNHN - Muséum National d'Histoire Naturelle, Paris, France (C. GIRARD);

MZLU - Museum of Zoology, Lund University, Lund, Sweden (R. Danielsson);

NNIC - Namibian National Insect Collection State Muséum, Windhoek, Namibia (E. Marais);

SAM - South African Museum, Cape Town, Republic of South Africa (M. COCHRANE);

TM - Transvaal Museum of Natural History, Pretoria, Republic of South Africa (S. Endrödy-Younga);

ZMS - Naturhistoriska Riksmuseet, Stockholm, Sweden (B. Gustafsson, J. Ferrer).

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#### METHODS AND ABBREVIATIONS

Means and ratios are based on all specimens listed under "Material examined" (8 males and 8 females if there were more specimens; measurements of the genitalia – 1 or 2 specimens). Measurements were made as follows: width of lateral pronotal border - in the middle of lateral pronotal margin; length of lacinia - from suture of apical and basal parts to apex; length of body - from anterior margin of labrum to elytral apex; width of body – maximum elytral width. The following abbreviations have been used in the descriptions:

pl/pb - pronotal length/breadth ratio;

el/eb - elytral length/breadth ratio;

el/pl - length ratio elytra/pronotum;

eb/pb - breadth ratio elytra/pronotum;

ft - fore tarsus

mt - mid tarsus

ht - hind tarsus

lbp - length of basal part of aedeagal tegmen;

lap - length of apical part of aedeagal tegmen;

ll - length of lacinia;

tll - total length of lacinia;

c1/c2/c3/c4/c4-c3 - length ratios coxites1/coxites2/coxites3/coxites4/coxites4-coxites3;

bc1/lc1 - coxites1 breadth/length ratio;

lp/lc1 - length ratio paraproct/coxites1.

### Atrocrates Koch, 1956

Atrocrates Koch, 1956: 82. Type species: Trigonopus platyderus Mulsant et Rey, 1853, designated by Koch 1956: 83

#### DIAGNOSIS

The genus, like *Crypticanus*, has the upper edge of elytral base rounded (i.e. with no sharp edge, sometimes only slightly arched); delicate, barely visible puncturation of pronotum and elytral intervals; lateral border of pronotum distinctly expanded anterior to posterior angles and widened fore and mid tarsi in male (except *A. peringueyi*).

The genera differ in the structure of the mentum (strongly widened in *Crypticanus*) and the border of pronotal posterior angles (rounded in *Atrocrates*, rectangular in *Crypticanus*).

### DESCRIPTION

Medium and large species (8.4-19.0 mm). Body colour from dark brown to black; upperside mat or slightly shiny, with a greasy sheen, puncturation delicate, often invisible; underside shiny, puncturation most often distinct, moderately coarse. Body oval, rather strongly convex, elytra slightly tucked in posteriorly (small part of interval IX visible from underside). Head widest anterior to eyes, genal canthus wider than eyes (figs 126, 145). Mid part of mentum narrowed apically; median keel reaching anterior margin; lateral margins (wings) very wide (figs 24, 127, 181); mid part widened and lateral wings narrow in A. podagricus and A. occultator (figs 78, 147). Eyes laterally narrowed, 1-5 facets visible between gena and tempus (9-10 in A. evestigator, fig. 23). Antenna similar to that in *Trigonopus*. Frontoclypeal suture extremely weak, practically invisible. Pronotum with sides weakly rounded, narrowing anteriad, nearly parallel in basal half, often pronotum trapezoidal, widest at base; base straight or slightly arcuate (posterior angles produced posteriad), narrowly bordered; lateral border very wide, always wider than antennal segment 3, before posterior angles considerably expanded and gently narrowing it passes into basal border; at posterior angles inner margin of the border rounded; border of anterior margin most often disappearing in the middle; pronotal disc slightly convex, with longitudinal concavity along lateral borders (lateral border seems strongly convex)

(figs 44, 52) or pronotal disc and lateral border uniformly convex (lateral border seems flat) (figs 28, 31, 37). Upper edge of elytral base weakly convex and rounded (with no keel); lower edge often strongly, sharply arched, passing into humeral angle. Elytral intervals most often poorly convex; elytral striae punctatosulcate or punctate (in A. oweni and A. splendidus); connection of elytral striae in apical part as follows: 1-9, 2-7, 3-6, 4-5, 8-free. Prosternal process protruding towards mesosternum, with a border interrupted at apex. Body apterous, metasternum shortened. Abdominal ventrites delicately punctate, anterior margins with longitudinal, fine wrinkles, two last ventrites smooth.; last ventrite bordered. Male fore tibia simple or inner margin with some structures (denticles, concavities) apically and with a blunt denticle at base. Male fore and mid tarsi widened (narrow in A. peringuevi); female tarsi narrow, with glabrous gutters ventrally on all segments. Legs of both sexes have tibiae with spinules on underside, inner side of male hind tibia with a longitudinal ridge and a row of dense setae, male femora densely pubescent on inner side. General structure of aedeagus (figs 34, 92) and female reproductive system (figs 61, 106, 139) as in other members of the trigonopoid *Platynotina*.

### REMARKS

Atrocrates can be divided in two species groups. One (bisinuatus, bredasdorpensis, capensis, dentatus, evestigator, formosus, montiscedri, occultator, ordinarius, metasimius, platyderus, pliskoae, podagricus, simius, sinuosus, striatus, libidinosus) is characterised by the following features: inner margin of male fore tibia with some structures (denticles, concavities) apically, and with a blunt denticle at base; another group (endrodyi, garbarczyki, largus, latemarginatus, oweni, peringueyi, robustus, splendidus) has male fore tibia simple. Characters distinguishing the second group are typical plesiomorphies (in the trigonopoid Platynotina). Structure of the pronotal border is, in my opinion, the most important character of the genus Atrocrates. A. podagricus and A. occultator are similar to Crypticanus in the presence of a wide mid part of the mentum, and A. robustus in the structure of the male fore tibia. The above characters suggest that there are "transitory" species between the genera Atrocrates and Crypticanus.

### DISTRIBUTION

Republic of South Africa (southern part of Cape Province).

### KEY FOR SPECIES DETERMINATION

1.	Mid part of mentum widened anteriad or parallelsided (figs 78, 147)
	Mid part of mentum narrowing anteriad (figs 24, 127, 181)
2.	Hypostoma with a process near maxillary articulation (figs 146, 147)
	podagricus
	Hypostoma simple occultator

3.	Pronotal sides almost parallel in basal half, often pronotum trapezoidal, widest at base (especially visible in females); posterior angles of pronotum produced posteriad, base arcuate (figs 22, 44, 52, 53)
	Pronotal sides rounded or subparallel, widest basal 1/3 to 1/2 posterior angles of pronotum not produced posteriad, base straight (figs 15, 28, 31, 37) 12
4.	Lateral pronotal border wide (over 2.5 x wider than antennal segment 3) (figs 22, 158)
	Lateral pronotal border narrow (not exceeding 2.0 x width of antennal segment 3) (figs 44, 52, 53, 74)
5.	Eye strongly narrowed, 3-4 facets visible laterally; inner margin of male fore tibia with a large denticle (figs 156, 157); male mid tibia slightly bent, with apical denticle (figs 158, 160); hind tibia in both sexes with two longitudinal ridges on outer margin
	Eye weakly narrowed, 9-10 facets visible laterally (fig. 23); inner margin of male fore tibia with a small denticle (figs 25, 26); male mid tibia strongly bent, with preapical denticle; hind tibia in both sexes smooth (fig. )
6.	Outer margin of male mid tibia S-like bent (figs 50, 51, 75, 76)
	Outer margin of male mid tibia straight (figs 12, 13, 167, 168) 10
	Mid male tibia with a large preapical denticle (figs 50, 51, 59, 60)
	Mid male tibia with a small apical or preapical denticle (figs 177, 179) 9
8.	Apical part of prosternal process with longitudinal concavity (fig. 55); apical
	part of aedeagus without gap between paramers (fig. 56); denticle of mid male
	tibia obtuse (figs 59, 60)
	between paramers (fig. 47); denticle of mid male tibia rectangular (figs 50, 51)
9.	Elytral intervals slightly convex (fig. 73); inner margin of male fore tibia with a sharp denticle (figs 71, 72); male mid tibia with an apical denticle (figs 75, 77)
	Elytral intervals flat (fig. 174); inner margin of male fore tibia with a straight
	denticle (figs 175, 176); male mid tibia with a preapical denticle (figs 177, 179)
10	Elytral humeri rectangular and strongly convex anteriad (fig. 9); mid male
	tibia with an apical denticle (fig. 13)
	Elytral humeri widely rounded and moderately convex anteriad (fig. 180);
	mid male tibia with a preapical denticle (figs 168, 179)
11	Inner margin of male fore tibia with a small process (obtuse) (figs 182, 183);
	outer margin of male mid tibia with evenly convex ridges, inner side with an
	obtuse denticle (fig. 184) striatus
	Inner margin of male fore tibia with a large denticle (straight or sharp) (figs 165, 166); outer margin of male mid tibia with two different ridges (one of them is strongly convex), inner side with a sharp denticle (figs 167, 168)
	sinuosus

 13.  14.	Elytral striae punctate, without elongated concavities (figs 103, 108)
16.	Body size: length 11.5-14.4 mm, width 5.3-6.2 mm; male fore tibia as in figs 88, 89 montiscedri
	Body size: length 14.5-16.8 mm, width 6.6-7.5; male fore tibia as in figs 115, 116 robustus
	Outer margin of male mid tibia with two different ridges, one of them is strongly convex (figs 133-135)
	Outer margin of male mid tibia with two equally, moderately convex ridges (figs 100, 101)
18.	Inner margin of male fore tibia without a denticle (varied, figs 95-98)ordinarius
	Inner margin of male fore tibia with a denticle
	Denticle of male fore tibia large and sharp (fig. 2) bisinuatus
	Denticle of male fore tibia varying from moderately large and rectangular to small and obtuse (figs 6, 7)
20.	Elytral humeri rounded and not protruding outwards (fig. 30) garbarczyki
	Elytral humeri convex and protruding outwards (figs 20, 64)
21.	Sides of pronotum subparallel, with wide longitudinal groove near lateral borders (fig. 62); lateral part of episternum strongly flattened, with deep
	groove along margin (fig. 64) latemarginatus
	Sides of pronotum rounded, with narrow longitudinal groove near lateral borders (fig. 15); lateral part of episternum moderately flattened, without
22	deep groove along margin
22.	Male fore tarsus narrow, segments 1-4 with glabrous median gutters underside
	Male fore tarsus wide, segments 1-3 without glabrous median gutters underside (figs 39, 40)
23.	Inner side of male fore tibia with a denticle (figs 18, 19) dentatus
	Inner side of male fore tibia without a denticle (figs 32, 33)
24.	Lateral border of pronotum wide (1.4 x wider than antennal segment 3) (fig.
	37); elytral intervals flat (fig. 38)
	Lateral border of pronotum narrow (1.0 x wider than antennal segment 3)
	(fig. 28); elytral intervals convex (fig. 29) endrodyi

### Atrocrates bisinuatus Koch, 1956

(figs 1-2, 27)

Atrocrates bisinuatus Koch, 1956: 434.

### Locus typicus

Great Winterhoek Montain (Republic of South Africa: Cape Province).

### DIAGNOSIS

A. bisinuatus is close to bredasdorpensis, ordinarius, platyderus and montiscedri, due to the pronotal shape (sides rounded), structure of the male fore tibia (with denticles on inner side) and mid tibia (with an apical denticle). The species differs from montiscedri in the shape of elytral humeri (protruding outwards in bisinuatus), from ordinarius and bredasdorpensis in structure of male fore tibia (inner margin with sharp denticle in bisinuatus), and from platyderus in the structure of male mid tibia (outer margin with two equally convex ridges in bisinuatus).

#### DESCRIPTION

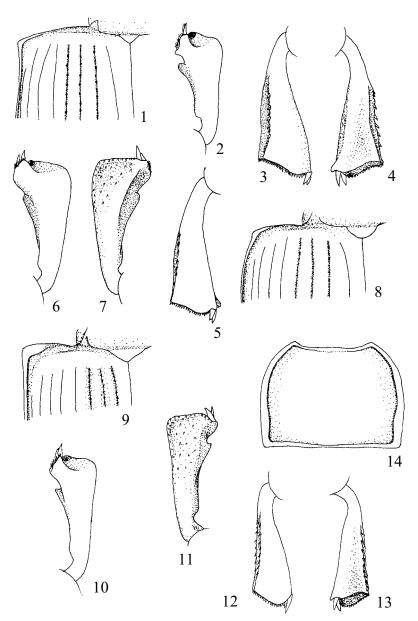
Body length 12.0 mm, pl/pb = 0.63, el/eb = 1.31, el/pl = 2.05, eb/pb = 0.97-1.06. Upperside of body mat, with a greasy sheen; head sparsely and delicately punctate, pronotum and intervals practically smooth, punctures invisible. Body underside slightly shiny; middle of prosternum delicately punctate, episternum smooth, sides wrinkled. Eye with 2 facets between gena and tempus. Antennal segment 3 ca. 2.2 x longer than segment 2. Pronotal disc slightly convex, with longitudinal concavity along lateral borders; sides rounded, widest near basal 1/ 3, narrowed anteriad; anterior angles not produced anteriad, rounded; posterior angles rounded, not produced posteriad; pronotum base straight; lateral border convex, 1.1 x wider than antennal segment 3. Scutellum wide, distance between humeral angle and scutellum ca. 2.8 x scutellum width. Anterior part of elytron as in fig. 1. Lower edge of elytral base very poorly convex; upper edge smooth, poorly convex; humeral angle rounded, moderately protruding outwards. Elytral intervals flat; striae punctato-sulcate, slightly incised, punctures very small but well visible. Upper margin of elytral epipleura well visible in apical part, epipleura located dorsally. Male fore and mid tarsi widened, glabrous gutters on underside of tarsi according to the formula: ft absent, 4 mt, 1-3 ht. Male fore tibia with a straight, large denticle on inner side (fig. 2); inner margin of male mid tibia with an apical denticle; outer margin of hind tibia of both sexes smooth, without longitudinal ridges.

### Түре

Paratype: *Atrocrates bisinuatus* C. Koch sp. n.; Gt. Winterhoek, Tulbagh, 4.500 ft, Nov. 1916, LIGHTFOOD, (TM) 1 m.

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DISTRIBUTION (fig. 27)
Republic of South Africa (Cape Province: Tulbagh).



1-2. Atrocrates bisinuatus; 3-8. A. bredasdorpensis; 9-14. A. capensis: 1, 8, 9 – anterior part of elytron; 2, 6, 10 – dorsal and 7, 11 – ventral view of male fore tibia; 3, 12 latero-dorsal, 5 – dorsal and 4, 13 ventral view of male mid tibia; 14 – pronotum

### Atrocrates bredasdorpensis sp. nov.

(figs 3-8, 27)

NAME DERIVATION

From the name of the type locality.

Locus typicus

Bredasdorp (Republic of South Africa: Cape Province).

### Diagnosis

The species is close to *bisinuatus*, *ordinarius*, *platyderus* and *montiscedri*, due to the pronotal shape (sides rounded), structure of the male fore tibia (with denticles on inner side) and mid tibia (with an apical denticle). *A. bredasdorpensis* differs from *montiscedri* in the shape of elytral humeri, from *ordinarius* and *bisinuatus* in the structure of male fore tibia, and from *platyderus* in the structure of male mid tibia.

### DESCRIPTION

Body length 12.0-13.5 mm, pl/pb = 0.63-0.68, el/eb = 1.31-1.41, el/pl = 2.00-0.682.20, eb/pb = 0.97-1.06. Upperside of body mat, with a greasy sheen; head sparsely and delicately punctate, pronotum and intervals practically smooth, punctures invisible. Body underside slightly shiny; middle of prosternum delicately punctate, episternum smooth, sides wrinkled. Eye with 1-2 facets between gena and tempus. Antennal segment 3 ca. 2.2-2.3 x longer than segment 2. Pronotal disc slightly convex, with longitudinal concavity along lateral borders; sides rounded, widest near basal 1/3, narrowed anteriad; anterior angles not produced anteriad, rounded; posterior angles rounded, not produced posteriad; pronotum base straight; lateral border convex, 1.1 x wider than antennal segment 3. Scutellum wide, distance between humeral angle and scutellum ca. 2.7-2.8 x scutellum width. Anterior part of elytron as in fig. 8. Lower edge of elytral base very poorly convex; upper edge smooth, poorly convex; humeral angle rounded, moderately protruding outwards. Elytral intervals flat; striae punctato-sulcate, slightly incised, punctures very small but well visible. Upper margin of elytral epipleura well visible in apical part, epipleura located dorsally. Male fore and mid tarsi widened, glabrous gutters on underside of tarsi according to the formula: ft absent, 4 mt, 1-3 ht. Male fore tibia with a straight, large denticle on inner side (figs 6, 7); inner margin of male mid tibia with an apical denticle (figs 3-5); outer margin of hind tibia of both sexes obtuse, without longitudinal ridges. Aedeagus: lap/lbp/ll = 1.0/2.0/0.5; ovipositor: lp/lc1 = 4.6, bc1/lc1 = 3.4, c1/c2/c3/c4/c4-c3 = 1.0/2.0/2.1/2.5/0.4.

### Types

Holotype (male), MZLU: "S. Afr. Cape Prov. 7 miles SW Bredasdorp 30.XII.50. No.99; Swedish South Africa Expedition 1950-1951 Brinck-Rudebeck; *Atrocrates brincki* Koch (ex aff. *robertsensis* Koch.) C. Koch det.".

Paratypes: S.Afr. Cape Prov. 7 miles SW Bredasdorp 30.XII.50. No.99; Swedish South Africa Expedition 1950-1951 Brinck-Rudebeck; *Atrocrates brincki* Koch (ex aff. *robertsensis* Koch.) C. Koch det., (MZLU) 1 m; Zoetendals Vallei, C.P. X-1940, G. Van Son, (TM) 1 m, 1 f; S. Afr. Cape Prov. Arniston 30.XII.50. No.98; Swedish South Africa Expedition 1950-1951 Brinck-Rudebeck; near *bisinuatus* C. Koch det., (JFC) 1 m; S. Africa Capstadt; *Trigonopus capicola* Muls. det.dr. Kaszab, (HNHM) 1 m; Mossel Bay; Sam-Col-AO 11888, (SAM) 3 m, 1 f; Bredasdp; Sam-Col-AO 11889, (SAM) 3 m, 1 f; S. Afr., S. W. Cape, Struisbaai, 34.46S – 20.03 E; 28.8.1983; E-Y: 1991 from under stones, leg Endrödy, Penrith, (TM) 2 m, 5 f; S. Afr., S. W. Cape, Struisbaai 15 km N, 33.33S – 20.06 E; 28.8.1983; E-Y: 2034 from under stones, leg Endrödy-Younga, (TM) 1 f.

DISTRIBUTION (fig. 27)

Republic of South Africa (Cape Province: Bredasdorp, Mossel Bay).

### Atrocrates capensis sp. nov.

(figs 9-14, 27)

NAME DERIVATION

From the name of the type locality.

TERRA TYPICA

"Cape" (Republic of South Africa: Cape Province).

### Diagnosis

The species resembles *bredasdorpensis* in the structure of male fore and mid tibiae; it is similar to *striatus* in the structure of pronotum. *A. capensis* differs from the remaining species in the shape of the lower edge of elytral base and humeral angle (very strongly produced anteriad).

### DESCRIPTION

Body length 11.5 mm, pl/pb = 0.74, el/eb = 1.22 (elytra rather wide), el/pl = 1.72, eb/pb = 1.04. Upperside of body mat, with a greasy sheen; head sparsely and delicately punctate, pronotum and intervals practically smooth, punctures invisible. Underside of body slightly shiny; prosternum delicately punctate, sides wrinkled; episternum very densely and coarsely punctate, punctures fused to form wrinkles. Mid part of mentum narrowed apically. Eye with 1-2 facets visible between gena and tempus. Antennal segment 3 ca. 2.3x longer than segment 2. Pronotum as in fig. 14, disc slightly convex, with shallow longitudinal concavity along lateral border; in male sides for 2/3 length almost parallel, divergent anteriad; anterior angles somewhat produced anteriad, rounded; posterior angles rounded; pronotal base almost straight, slightly arcuately emarginate; lateral

border 1.1 x wider than antennal segment 3. Scutellum wide, distance between humeral angle and scutellum ca. 2.5 x scutellum width. Anterior part of elytron as in fig. 9. Strongly produced anteriad lower edge of elytral base passes into a large, straight humeral angle, slightly protruding outwards; upper edge obtuse, poorly convex. Elytral intervals moderately convex; striae punctato-sulcate, punctures small but well visible. Upper margin of elytral epipleura well visible in apical part, epipleura dorsally located. Male fore and mid tarsi widened, glabrous gutters on the underside of tarsi according to the formula: ft absent, 4 mt, 1-3 ht. Male fore tibia with a sharp, distinct denticle on inner side (figs 10, 11); male mid tibia with an apical denticle on inner side (figs 12, 13). Aedeagus: lap/lbp/ll = 1.0/2.2/0.6.

Type

Holotype (male), HNHM: "Cape; Dr. Brauns; 581 Atrocrates simius Quens.; Atrocrates simius Quens. Dr. Z. Kaszab det.".

Distribution (fig. 27)

Republic of South Africa (Cape Province: Cape Town).

### Atrocrates dentatus sp. nov.

(figs 15-20, 27)

NAME DERIVATION

Latin adjective, dentatus: with denticle.

Locus typicus

Malmesbury (Republic of South Africa: Cape Province).

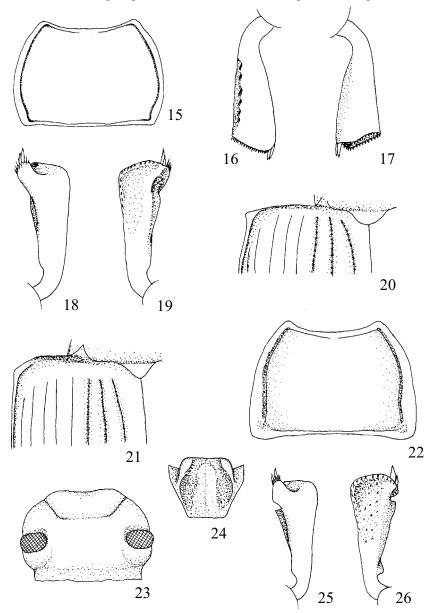
### DIAGNOSIS

In the structure of its male fore tibia the species resembles *ordinarius*; like *endrodyi*, *dentatus* has almost flat pronotal disc, without longitudinal concavity along lateral border, and inner side of male mid tibia with denticle. The structure of male mid tibia distinguishes *dentatus* from *ordinarius*, and male fore tibia from *endrodyi*.

#### DESCRIPTION

Body length 10.0-11.5 mm, pl/pb = 0.64-0.69, el/eb = 1.36-1.41, el/pl = 2.03-2.23, eb/pb = 1.00-1.04. Upperside of body mat, with a greasy sheen; head and pronotum sparsely and delicately punctate, intervals practically smooth, punctures invisible. Underside of body slightly shiny; prosternal sides and episternum with longitudinal wrinkles. Eye with 2-3 facets visible between gena and tempus. Antennal segment 3 ca. 2.1 x longer than segment 2. Pronotum as in fig. 15, disc

strongly flattened, between disc and lateral border a strong incision in the form of a narrow groove; sides rounded; widest at 1/3 length from base, narrowed anteriad; anterior angles produced anteriad, rounded; posterior angles rounded,



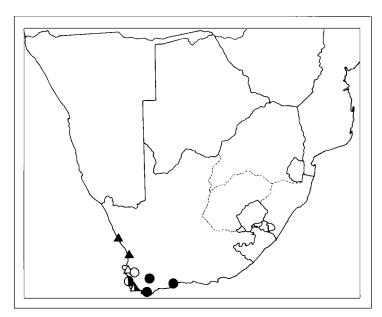
15-20. Atrocrates dentatus; 21-26. A. evestigator: 15, 22 – pronotum; 16 – latero-dorsal and 17 – ventral view of male mid tibia; 18, 25 – dorsal and 19, 26 – ventral view of male fore tibia; 20, 21 – anterior part of elytron; 23 - head; 24 – mentum

not produced posteriad; pronotal base straight; lateral border flat, 1.1 x wider than antennal segment 3. Scutellum wide, distance between humeral angle and scutellum ca. 2.8-3.0 x scutellum width. Anterior part of elytron as in fig. 20. Lower edge of elytral base poorly convex, upper edge smooth, moderately convex; humeral angles straight, protruding outwards. Elytral intervals almost flat; striae strongly incised, punctato-sulcate, punctures small but well visible. Upper margin of elytral epipleura well visible in apical part, epipleura located dorsally. Male fore and mid tarsi expanded, glabrous gutters on the underside of tarsi according to the formula: ft absent, 4 mt, 1-3 ht. Inner margin of male fore tibia with a sharp median ridge terminated before apex on the lower margin of transverse concavity (figs 18, 19); male mid tibia without denticle on inner margin (figs 16, 17); outer margin of hind tibia obtuse, without longitudinal ridges. Aedeagus: lap/lbp/ll = 1.0/2.1/0.4; ovipositor: lp/lc1 = 3.8, bc1/lc1 = 2.5, c1/c2/c3/c4 = 1.0/1.7/1.8/1.9, the 4th plate of coxite not protruding beyond the 3rd one (c4-c3 = 0.0).

**TYPES** 

Holotype (male), SAM: "Malmesbury Lightfoot; Sam-Col-AO". Paratypes: Malmesbury Lightfoot; Sam-Col-AO, (SAM) 3 m, 4 f.

DISTRIBUTION (fig. 27)
Republic of South Africa (Cape Province: Malmesbury).



27. Distribution of *Atrocrates bisinuatus* (open circle), *A. bredasdorpensis* (solid circles), *A. capensis* (white and black circle), *A. dentatus* (open triangle), *A. formosus* (solid triangle) and *A. metasimius* (white and black triangle)

### Atrocrates endrodyi sp. nov.

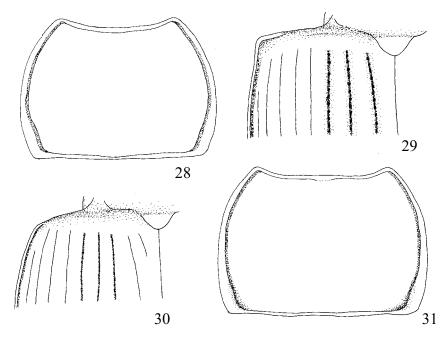
(figs 28-29, 32-33, 70)

### NAME DERIVATION

In honour of Dr Sebastian Endrödy-Younga from the Transvaal Museum of Natural History, Pretoria, Republic of South Africa.

### Locus typicus

Sneeukop (Republic of South Africa: Cape Province).



28-29. Atrocrates endrodyi; 30-31. A. garbarczyki: 28, 31 – pronotum; 29, 30 – anterior part of elytron

### DIAGNOSIS

The species is close to *peringueyi*, *garbarczyki* and *largus* in the structure of male fore and mid tibiae (inner side simple, without denticles), and the convexity of the pronotal disc (almost flat, without longitudinal concavity along lateral border). *A. endrodyi* is easily distinguished from *peringueyi* by the male fore and mid tarsi (narrow in *peringueyi*; widened in *endrodyi*); from *garbarczyki* by the shape of elytral humeri (rounded, not protruding outwards in *garbarczyki*; rectangular, protruding outwards in *endrodyi*); and from *largus* by the structure of pronotum and elytral surface (intervals flat, striae almost sulcate in *largus*; intervals slightly convex, striae punctato-sulcate in *endrodyi*).

DESCRIPTION

Body length 8.5-11.0 mm, pl/pb = 0.67-0.70, el/eb = 1.22-1.33, el/pl = 1.84-1.002.07, eb/pb = 1.04-1.12. Upperside of body mat, with a greasy sheen; head, pronotum and elytral intervals sparsely and delicately punctate. Underside of body slightly shiny; prosternum smooth, episternum with shallow longitudinal wrinkles. Eye with 3-4 facets visible between gena and tempus. Antennal segment 3 ca. 1.8 x longer than segment 2. Pronotum as in fig. 28, disc strongly flattened, between disc and lateral border a strong incision in the form of a narrow groove; sides rounded; widest at 1/3 length from base, narrowed anteriad; anterior angles slightly produced anteriad, rounded; posterior angles rounded, not produced posteriad; pronotal base straight; lateral border flat, as wide as antennal segment 3. Scutellum wide, distance between humeral angle and scutellum ca. 2.8-3.0 x scutellum width. Anterior part of elytron as in fig. 29. Lower edge of elytral base poorly convex, upper edge obtuse; humeral angles straight, protruding outwards. Elytral intervals slightly convex; striae strongly incised, punctato-sulcate, punctures small but well visible. Upper margin of elytral epipleura not visible in apical part, epipleura located dorsally. Male fore and mid tarsi expanded, glabrous gutters on the underside of tarsi according to the formula: ft absent, 4 mt, 1-3 ht. Inner margin of male fore tibia with longitudinal concavity (figs 32, 33); male mid tibia without denticle on inner margin; outer margin of hind tibia obtuse, without longitudinal ridges. Aedeagus: lap/lbp/ll = 1.0/2.4/0.4; ovipositor: 1p/lc1 = 3.5, bc1/lc1 = 1.64, c1/c2/c3/c4/c4-c3 = 1.0/1.2/1.1/1.4/0.3.

Types

Holotype (male), TM: "S. Afr., SW Cape, Sneeukop, 34.03S-18.59E; 12.11.1973; E-Y: 233, from under stones, leg. Endrödy-Younga".

Paratypes: S. Afr., SW Cape, Hawaquas rad tower, 33.41S-19.06E; 5.11.1973; E-Y: 205, from under stones, leg. Endrödy-Younga, (TM) 2 m, 1 f; S. Afr., SW Cape, Sneeukop, 34.03S-18.59E; 12.11.1973; E-Y: 233, from under stones, leg. Endrödy-Younga, (TM) 4 m, 3 f.

Distribution (fig. 70)

Republic of South Africa (SW Cape Province: Hawaquas, Sneeukop).

### Atrocrates evestigator sp. nov.

(figs 21-26)

NAME DERIVATION

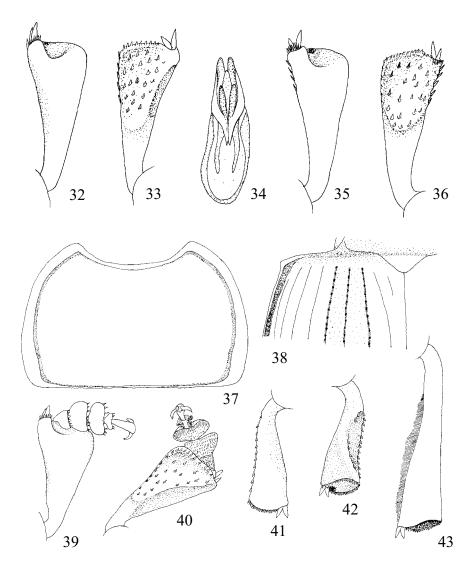
Latin adjective, evestigator: investigator.

TERRA TYPICA

"Cap de Bonne Espérance" (Republic of South Africa: Cape Province).

### Diagnosis

The species resembles *simius* and *metasimius* in the structure of pronotum and male fore and mid tibiae. The structure of eye (strongly convex outwards, 9-10 facets visible laterally) and wider mid part of mentum distinguish *evestigator* from *simius* and *metasimius*.



32-33. Atrocrates endrodyi; 34-36. A. garbarczyki: 32, 35 - dorsal and 33, 36 - ventral view of male fore tibia; 34 - aedeagus; 37-43. Atrocrates largus: 37 - pronotum; 38 - anterior part of elytron; 39 - dorsal and 40 - ventral view of male fore tarsus and tibia; 41 - dorsal and 42 - lateroventral view of male mid tibia; 43 - ventral view of male hind tibia

DESCRIPTION

Body length 16.0 mm, pl/pb = 0.63, el/eb = 1.30 (elytra rather wide), el/pl =1.98, eb/pb = 0.96. Body upperside mat, with a greasy sheen; head sparsely and delicately punctate, pronotum and intervals practically smooth, punctures invisible. Body underside slightly shiny; prosternum delicately punctate, sides wrinkled; episternum very densely and coarsely punctate, punctures fusing to form wrinkles. Mid part of mentum rather wide, lateral margins thickened, lateral wings well visible (fig. 24). Head widest at the level of eyes, which are strongly protruding; between gena and tempus 9-10 facets visible (fig. 23). Antennal segment 3 much elongate, ca. 3.0 x longer than segment 2. Pronotum as in fig. 22, disc slightly convex, with shallow longitudinal concavity along lateral border; sides widest at base, gradually narrowed apically, forming a trapezium; anterior angles not produced anteriad, rounded; posterior angles rounded; pronotum base arcuately emarginate; lateral border convex and very wide, 2.2 x wider than antennal segment 3. Lower edge of elytral base slightly produced anteriad, upper edge obtuse, moderately convex; humeral angles protruding outwards. Scutellum moderately wide, distance between humeral angle and scutellum ca. 3.2 x scutellum width. Anterior part of elytron as in fig. 21. Elytral intervals slightly convex; striae distinctly incised, almost sulcate, punctures poorly visible. Upper margin of elytral epipleura well visible in apical part, epipleura dorsally located. Male fore and mid tarsi expanded, glabrous gutters on the underside of tarsi according to the formula: ft absent, 4 mt, 1-3 ht. Male fore tibia with a large, straight denticle at base of subapical concavity on inner side (figs 25, 26); male mid tibia S-like bent, with a concavity on outer side, and with a blunt subapical denticle on inner margin.

TYPE

Holotype (male), MNHN: "marginicollis var. similis; Type Mulsant; Museum Paris Coll. De Marseul 1890, C. B. Esp.".

DISTRIBUTION

Republic of South Africa (Cape Province).

### Atrocrates formosus sp. nov.

(figs 27, 44-51)

NAME DERIVATION

Latin adjective, formosus: beauty formed.

Locus typicus

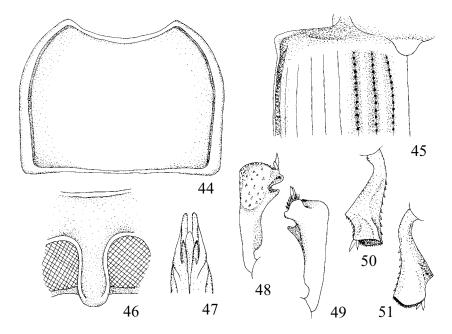
Lamberts (Republic of South Africa: Cape Province).

### Diagnosis

See diagnosis of A. libidinosus.

### DESCRIPTION

Body length 16.0-16.2 mm, pl/pb = 0.66-0.76, el/eb = 1.28-1.39, el/pl = 1.77-2.06, eb/pb = 0.96-1.00. Upperside of body mat, with a greasy sheen; head, pronotum and elytral intervals sparsely and delicately punctate. Body underside slightly shiny; prosternum and episternum distinctly punctate. Eye with 2-3



44-51. Atrocrates formosus: 44 – pronotum; 45 – anterior part of elytron; 46 – prosternal process; 47 – aedeagus, ventral view of apical part; 48 – ventral and 49 – dorsal view of male fore tibia; 50 – latero-ventral and 51 – dorsal view of male mid tibia

facets between gena and tempus. Antennal segment 3 ca. 2.9-3.0 x longer than segment 2. Pronotum as in fig. 44, disc slightly convex, with longitudinal concavity along lateral borders; pronotum widest at base, sides subparallel in male; anterior angles not produced anteriad, rounded; posterior angles rounded, produced posteriad; pronotal base arcuate; lateral border convex and moderately wide, 1.2 x wider than antennal segment 3. Scutellum not wide, distance between humeral angle and scutellum ca. 4.5-4.6 x scutellum width. Anterior part of elytron as in fig. 45. Lower edge of elytral base produced anteriad; upper edge obtuse, slightly convex; humeral angle rectangular, strongly protruding outwards. Elytral intervals distinctly convex; striae punctato-sulcate, incised, punctures well visible. Upper margin of elytral epipleura visible in apical part,

sometimes disappearing just before apex, epipleura located dorsally. Prosternum gradually convex in the middle, prosternal process flat (fig. 46). Male fore and mid tarsi widened, glabrous gutters on underside of tarsi according to the formula: ft absent, 4 mt, 1-3 ht. Male fore tibia with apical and basal denticles on inner side (figs 48, 49); outer margin of male mid tibia S-like bent, inner margin with large, rectangular preapical denticle (figs 50, 51); male hind tibia slightly bent and flattened on inner side; outer margin of hind tibia of both sexes smooth, without longitudinal ridges. Aedeagus as in fig. 47, apical part with narrow gap between paramers, lacinia sharp, lap/lbp/ll = 1.0/1.9/0.4.

**TYPES** 

Holotype (male), TM: "S. Afr., W Cape Prov. Lamberts Bay, 32.05S – 18.24E; 28.8.1989: E-Y: 2672, sifted litter, leg. Endrödy&Klimaszew".

Paratypes: S. Afr., W Cape Prov. Lambertsbai, dunes, 32.05S – 18.24E; 30.7.1989: E-Y: 2619, litter under bushes, leg. Endrödy&Klimaszew, (TM) 1 m; S. Afr. Namaqualand, Tities Baai, 3 km N.W. 31.10S-17.46E; 28.81979; E-Y: 1614, singled, leg. Endrödy-Younga, (TM) 1 m.

DISTRIBUTION (fig. 27)

Republic of South Africa (Cape Province: Namaqualand, Lamberts).

### Atrocrates garbarczyki sp. nov.

(figs 30-31, 34-36, 70)

NAME DERIVATION

In honour of Dr. Henryk Garbarczyk from the Museum and Institute of Zoology, Polish Academy of Sciences, Warsaw, Poland.

Locus typicus

Haweguas (Republic of South Africa: Cape Province).

### DIAGNOSIS

A. garbarczyki is close to largus in the structure of elytra (intervals flat; striae strongly incised, almost sulcate, punctures very small) and pronotal disc (almost flat, without longitudinal concavity along lateral border); it is also similar to peringueyi, largus and endrodyi in the structure of male fore and mid tibiae (inner side simple, without denticles). A. garbarczyki is easily separated from the species just named by the shape of the elytral humeri (rounded, not protruding outwards).

### DESCRIPTION

Body length 8.8-11.6 mm, pl/pb = 0.62-0.69, el/eb = 1.28-1.38, el/pl = 1.96-2.27, eb/pb = 1.02-1.09. Upperside of body mat, with a greasy sheen; head, pronotum and elytral intervals sparsely and delicately punctate. Underside of

body slightly shiny; prosternum delicately punctate, episternum with shallow longitudinal wrinkles. Eve with 2-3 facets visible between gena and tempus. Antennal segment 3 ca. 2.2-2.3 x longer than segment 2. Pronotum as in fig. 31, disc strongly flattened, between disc and lateral border a strong incision in the form of a narrow groove; sides rounded; widest at 1/3 length from base, narrowed anteriad; anterior angles slightly produced anteriad, rounded; posterior angles rounded, not produced posteriad; pronotal base straight; lateral border flat, as wide as antennal segment 3. Scutellum wide, distance between humeral angle and scutellum ca. 2.5-2.7 x scutellum width. Anterior part of elytron as in fig. 30. Lower edge of elytral base poorly convex, upper edge obtuse; humeral angles rounded, not protruding outwards. Elytral intervals flat; striae strongly incised, almost sulcate, punctures small, practically invisible. Upper margin of elytral epipleura not visible in apical part, epipleura located dorsally. Male fore and mid tarsi widened, glabrous gutters on the underside of tarsi according to the formula: 4 ft, 4 mt, 1-3 ht. Male fore and mid tibiae simple, without denticle on inner margin (figs 35, 36); outer margin of hind tibia obtuse, without longitudinal ridges. Aedeagus (fig. 34): lap/lbp/ll = 1.0/1.9/0.5; ovipositor: lp/lc1 = 4.1, bc1/11c1 = 2.7, c1/c2/c3/c4/c4-c3 = 1.0/1.9/1.8/2.1/0.3.

Types

Holotype (male), TM: "S. Afr., W Cape, Hawequas, 33.34S-19.08E; 5.11.1973; E-Y: 205, from under stones, leg. Endrödy-Younga".

Paratypes: "S. Afr., W Cape, Hawequas, 33.34S-19.08E; 5.11.1973; E-Y: 205, from under stones, leg. Endrödy-Younga, (TM) 2 m, 3 f; S. Afr., Cape-Cedarbg, Devil's Kloof, 850m, 32.28S-19.06E; 9.11.1983; E-Y: 2060, sift. litter; stones, leg. Endrödy-Younga, (TM) 5 m, 10 f; S. Afr., SW Cape Prov., Limietberge, 33.33S-19.07E; 7.11.1973; E-Y: 216, under stones, 900m, leg. ENDRÖDY-YOUNGA, (TM) 2 f.

Distribution (fig. 70)

Republic of South Africa (SW Cape Province: Cedarberge, Hawequas, Limietberge).

### Atrocrates largus sp. nov.

(figs 37-43, 119)

NAME DERIVATION

Latin adjective, *largus*: generous.

Locus typicus

Robertson (Republic of South Africa: Cape Province).

### Diagnosis

The species is similar to *peringueyi*, *garbarczyki*, *latemarginatus* and *endrodyi* in the structure of male fore and mid tibiae (inner side simple, without denticles); like *peringueyi*, *garbarczyki* and *endrodyi*, it has almost flat pronotal disk (without longitudinal concavity). The structure of elytra (intervals flat; striae incised, almost sulcate, punctures very small) places *largus* close to *peringueyi* and *garbarczyki* and differs from *latemarginatus* and *endrodyi*. *A. largus* differs from *endrodyi* in the pronotal structure, from *peringueyi* in the male fore and mid tarsi, and from *garbarczyki* in the shape of the elytral humeri.

### DESCRIPTION

Body length 10.0-11.1 mm, pl/pb = 0.55-0.64, el/eb = 1.15-1.28, el/pl = 2.20-2.22, eb/pb = 1.02-1.06. Upperside of body mat, with a greasy sheen; head, pronotum and elytral intervals sparsely and delicately punctate. Underside of body slightly shiny; prosternum and episternum densely and distinctly punctate. Eye with 3-4 facets visible between gena and tempus. Antennal segment 3 ca. 2.2-2.3 x longer than segment 2. Pronotum as in fig. 37, disc strongly flattened, between disc and lateral border a strong incision in the form of a narrow groove; sides rounded; widest at 1/3 length from base, narrowed anteriad; anterior angles slightly produced anteriad, rounded; posterior angles rounded, not produced posteriad; pronotal base straight; lateral border flat and wide, ca. 1.4 x wider than antennal segment 3 (2.3 x at base). Scutellum moderately wide, distance between humeral angle and scutellum ca. 3.2-3.4 x scutellum width. Anterior part of elytron as in fig. 38. Lower edge of elytral base poorly convex, upper edge obtuse; humeral angles rectangular, protruding outwards. Elytral intervals flat; striae strongly incised, almost sulcate, punctures small, practically invisible. Upper margin of elytral epipleura not visible in apical part, epipleura located dorsally. Male fore tarsi strongly widened, glabrous gutters on the underside of tarsi according to the formula: 4 ft, 3-4 mt, 1-3 ht. Male fore tibia with longitudinal concavity on inner side (figs 39, 40); mid tibia simple, inner margin without denticle (figs 41, 42); hind tibia with row of long setae on inner margin, outer margin obtuse, without longitudinal ridges (fig. 43). Ovipositor: lp/lc1 = 4.3, bc1/lc1 = 3.2, c1/c2/c3/c3c4/c4-c3 = 1.0/1.7/1.8/2.5/0.5.

### **TYPES**

Holotype (male), TM: "S. Afr., SW Cape, Robertson, 10km S, 33.53S-19.57E; 28.10.1978; E-Y: 1488, singled, dunes, night, leg. Endrödy-Younga".

Paratypes: S. Afr., SW Cape, Robertson, 10km S, 33.53S-19.57E; 28.10.1978; E-Y: 1488, singled, dunes, night, leg. Endrödy-Younga, (TM) 1 f; S. Afr., SW Cape, Robertson, 10km S, 33.53S-19.57E; 5.12.1978; E-Y: 1522, groundtraps, 90days, leg. Endrödy-Younga (TM) 1 f; S. Afr., SW Cape, Mt. Hawequas SE, 110m, 33.41S-19.06E; 26.10.1978; E-Y: 1480, singled in day, leg. Endrödy-Younga, (TM) 1 f.

DISTRIBUTION (fig. 119)

Republic of South Africa (SW Cape Province: Haweguas, Robertson).

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### Atrocrates latemarginatus (Mulsant et Rey, 1853)

(figs 62-70)

Trigonopus latemarginatus Mulsant et Rey, 1853: 44; Gemminger et Harold 1870: 1911; Gebien 1910: 272; 1938: 292.

Atrocrates latemarginatus Mulsant et Rey: Koch 1956: 84.

TERRA TYPICA

"Cape de Bonne Espérance" (Republic of South Africa ).

DIAGNOSIS

See diagnosis of *largus*. A specific character that distinguishes *latemarginatus* from the related species of *Atrocrates* is the structure of the pronotum and episternum.

#### DESCRIPTION

Body length 8.5-10.0 mm, pl/pb = 0.65-0.67, el/eb = 1.33-1.39, el/pl = 1.98-2.15, eb/pb = 0.95-1.05 Upperside mat with a greasy sheen, puncturation very delicate, punctures practically invisible. Underside shiny; prosternum sides delicately punctate, middle and episternum stronger punctate, punctures larger. Eye with 3-4 facets visible between gena and tempus. Antennal segment 3 ca. 2.1 x longer than segment 2. Fronto-clypeal suture poorly marked, practically invisible. Pronotum as in fig. 62, disc almost flat, without shallow longitudinal concavity along lateral borders; sides subparallel, widest near basal 4/5; lateral border wide, 1.2 x wider than antennal segment 3. Scutellum moderately wide, distance between humeral angle and scutellum ca. 3.2-3.3 x scutellum width. Episternum strongly flattened, with deep gutter along the margin (fig. 63). Anterior part of elytron as in fig. 64. Upper edge of elytral base poorly convex, rounded (smooth, without ridge); lower edge straight, poorly convex; humeral angle straight, protruding outwards. Elytral intervals well convex; striae strongly incised, punctato-sulcate. Upper margin of elytral epipleura poorly visible in apical part. Male fore tarsi widened, glabrous gutters on the underside of tarsi according to the formula: 4 ft, 4 mt, 1-3 ht. Male fore and mid tibiae simple, evenly widened towards apex, without denticle on inner margin (figs 65-68); male hind tibia straight, with a row of setae on inner margin, outer margin smooth, without ridges (fig. 69). Aedeagus: lap/lbp/ll = 1.0/2.6/0.2; ovipositor: lp/lc1 = 3.9, bc1/lc1 = 2.8, c1/c2/c3/c4/c4-c3 = 1.0/2.5/2.1/2.5/0.2.

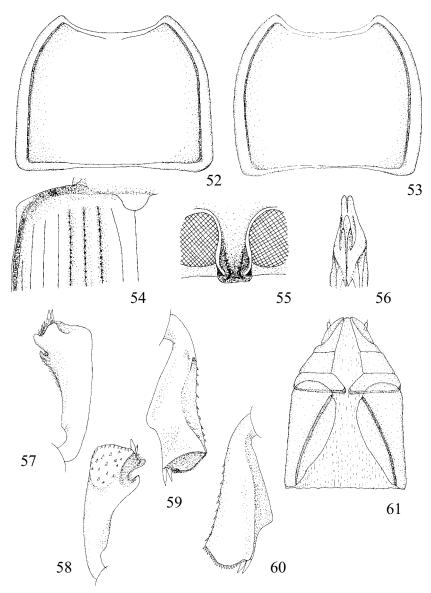
Түре

Holotype (male), MNHN: "*Trigonopus latemarginatus*; type; Museum Paris 1906 Coll. Léon Fairmaire, Cap B. Esp.".

MATERIAL EXAMINED

29.XII.1969, Rawsonville, Afrique Du Sud Cl. Bernard leg.; Museum Paris Coll. P. Ardoin 1978; *Atrocrates latemarginatus* Mulst. P. Ardoin det. 1970,

(MNHN) 8 m, 8 f; Rubripes Solier, Cape, Coll. Gory. (Solier.), (MHNG) 1 m; Tulbagh apr. 92; Sam-Col-AO, (SAM) 2 f; Z. A. 99, Seder Berg, 500-1100m, Clanwilliam distr. C.P.; Humus under bushes and large stones, 1.V.1962, N. Leleup (TM) 2 f; S. Afr., W Cape, Hawequas, 33.34S-19.08E; 5.11.1973; E-Y:



52-61. Atrocrates libidinosus: 52 – female and 53 – male pronotum; 54 – anterior part of elytron; 55 – prosternal process; 56 – aedeagus, ventral view of apical part; 57 – dorsal and 58 – ventral view of male fore tibia; 59 – latero-ventral and 60 – dorsal view of male mid tibia; 61 – ovipositor

205, from under stones, leg. Endrödy-Younga, (TM) 1 f; S. Afr. Witteberge, Matjiesf. 1600m, 33.16S-20.30E; 25.10.1978; E-Y: 1476, from under stones, leg. Endrödy-Younga, (TM) 3 f.

DISTRIBUTION (fig. 70)

Republic of South Africa (Cape Province: Clanwilliam, Rawsonville, Tulbagh, Witteberge).

### Atrocrates libidinosus sp. nov.

(figs 52-61, 70)

NAME DERIVATION

Latin adjective, libidinosus: libidinous.

Locus typicus

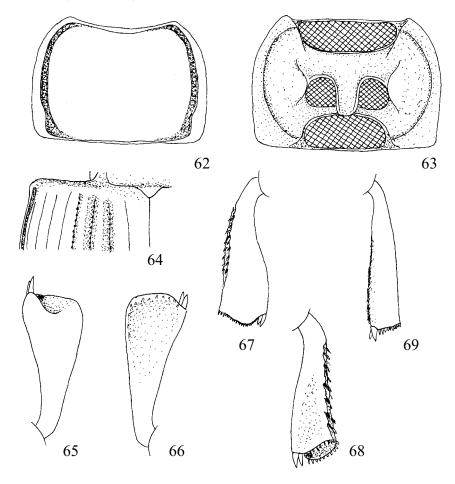
Melkbosstrand (Republic of South Africa: Cape Province).

### DIAGNOSIS

A. libidinosus is close to metasimius, simius, evestigator and formosus in the structure of the pronotum (sides subparallel in basal half or trapezoidal in females), the presence of denticles on inner side of male fore tibia, and the shape of outer margin of male mid tibia (S-like bent). The inner margin of the male mid tibia with large, preapical denticle distinguishes libidinosus and formosus from evestigator, simius and metasimius. A. libidinosus differs from formosus in the structure of the prosternal process, and the shape of the apical part of aedeagus.

### DESCRIPTION

Body length 15.5-17.1 mm, pl/pb = 0.65-0.69, el/eb = 1.28-1.37, el/pl = 2.02-1.092.19, eb/pb = 1.03-1.11. Upperside of body mat, with a greasy sheen; head and elytral intervals sparsely and delicately punctate, pronotum smooth. Body underside slightly shiny; middle of prosternum and episternum smooth. Eye with 1-2 facets between gena and tempus. Antennal segment 3 ca. 2.8-2.9 x longer than segment 2. Pronotal disc slightly convex, with longitudinal concavity along lateral borders; pronotum widest at base, sides subparallel in male (fig. 52), and converging anteriad in females (fig. 53); anterior angles not produced anteriad, rounded; posterior angles rounded, produced posteriad; pronotal base arcuate; lateral border convex and wide, 1.5 x wider than antennal segment 3. Scutellum moderately wide, distance between humeral angle and scutellum ca. 3.1-3.2 x scutellum width. Anterior part of elytron as in fig. 54. Lower edge of elytral base produced anteriad; upper edge obtuse, slightly convex; humeral angle rounded protruding outwards. Elytral intervals moderately convex; striae punctato-sulcate, slightly incised, punctures very small but well visible. Upper margin of elytral epipleura well visible in apical part, but disappearing just before apex, epipleura located dorsally. Prosternum convex in the middle, prosternal process with longitudinal concavity at apex (fig. 55). Male fore and mid tarsi widened, glabrous gutters on underside of tarsi according to the formula: ft absent, 4 mt, 1-3 ht. Male fore tibia with apical and basal denticles on inner side (figs 57, 58); outer margin of male mid tibia S-like bent, inner margin with large, obtuse preapical denticle (figs 59, 60); male hind tibia slightly bent and flattened on inner side; outer margin of hind tibia of both sexes smooth, without longitudinal ridges. Aedeagus as in fig. 56, apical part without gap between paramers, lacinia sharp, lap/lbp/ll = 1.0/1.9/0.4; ovipositor as in fig. 61: lp/lc1 = 6.25, bc1/lc1 = 3.2, c1/c2/c3/c4 = 1.0/1.7/1.8/2.5, the 4<sup>th</sup> plate of coxite not protruding beyond the 3<sup>rd</sup> one (c4-c3 = 0.0).



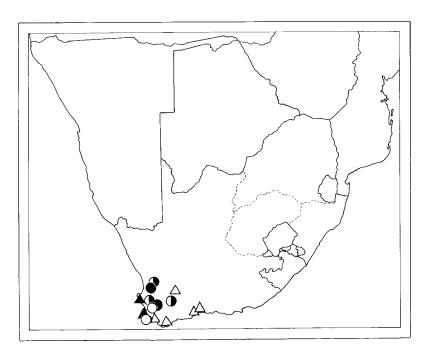
62-69. Atrocrates latemarginatus: 62 – pronotum; 63 – prosternum and pronotal episternum; 64 – anterior part of elytron; 65 – dorsal and 66 – ventral view of male fore tibia; 67 – latero-dorsal and 68 – ventral view of mid male tibia; 69 – ventral view hind male tibia

Types

Holotype (male), TM: "Rep. S. Africa, Cape, 2 km S. Melkbosstrand, IV-18-1992, CW&LB, O'BRIEN&GB.MARSHALL".

Paratypes: S. Afr., Cape Geelbek Forestry, 33.12S – 18.08E; 1.11.1983: E-Y: 2040, sandy hill night, leg. Endrödy-Younga, (TM) 2 m; Rep. S. Africa, Cape, 2 km S. Melkbosstrand, IV-18-1992, CW&LB, O'BRIEN&GB.MARSHALL, (TM) 2 m, 3 f.

DISTRIBUTION (fig. 70)
Republic of South Africa (Cape Province: Hopefield, Melkbosstrand).



70. Distribution of *Atrocrates endrodyi* (open circle), *A. garbarczyki* (solid circle), *A. latemarginatus* (solid/open circle), *A. libidinosus* (solid triangle) and *A. platyderus* (open triangle)

### Atrocrates metasimius sp. nov.

(figs 27, 71-77)

NAME DERIVATION

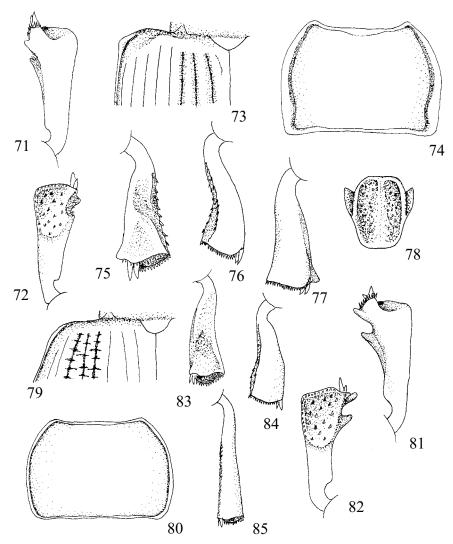
Greek prefix, meta: next to, plus simius.

LOCUS TYPICUS

Gordons Bay Cape (Republic of South Africa: Cape Province).

### Diagnosis

Like *simius* and *evestigator*, the species has similar shape of male mid tibia and a trapezoidal pronotum; it differs from *evestigator* in the structure of eye and mentum, and from *simius* in the apical denticle on male mid tibia (with preapical in *simius*). *A. metasimius* differs from both mentioned species in the structure of elytral base (the lower edge strongly produced anteriad, convexity of elytral base, the upper edge with the bisinuate emargination).



71-77. Atrocrates metasimius; 78-85. A. occultator: 71, 81 – dorsal and 72, 82 – ventral view of male fore tibia; 73, 79 – anterior part of elytron; 74, 80 – pronotum; 75, 83 - ventral, 76, 84 – laterodorsal and 77 – dorsal view of male mid tibia; 78 – mentum; 85 – ventral view of male hind tibia

DESCRIPTION

Body length 16.0 mm, pl/pb = 0.68, el/eb = 1.26 (elytra wide), el/pl = 1.92, eb/pb = 1.04. Upperside of body mat, with a greasy sheen; head sparsely and delicately punctate, pronotum and intervals practically smooth, punctures invisible. Body underside slightly shiny; prosternum smooth, wrinkled on sides; episternum very densely and coarsely punctate. Mid part of mentum very strongly narrowed apically. Eye laterally narrowed, 1 facet visible between gena and tempus. Pronotum as in fig. 74, disc slightly convex; with longitudinal, shallow concavity along lateral border; sides for 2/3 length almost parallel in male; anterior angles not produced anteriad, rounded; posterior angles rounded; pronotal base almost straight, slightly bisinuate; lateral border convex and wide, 2.0 x wider than antennal segment 3. Scutellum wide, distance between humeral angle and scutellum ca. 2.9 x scutellum width. Anterior part of elytron as in fig. 73. Lower edge of elytral base produced anteriad, upper edge obtuse, bisinuately convex; humeral angles rounded, protruding outwards. Elytral intervals slightly convex; striae distinctly incised, almost sulcate, punctures invisible. Upper margin of elytral epipleura well visible in apical part, epipleura located dorsally. Male fore and mid tarsi expanded, glabrous gutters on the underside of tarsi according to the formula: ft absent, 4 mt, 1-3 ht. Male fore tibia with a large, straight denticle at base of subapical concavity on inner side (figs 71, 72); male mid tibia S-like bent, outer side with a concavity, inner margin with apical denticle (figs 75-77). Aedeagus: lap/lbp/ll = 1.0/2.1/0.6.

TYPE

Holotype (male), JFC: "11; Gordons Bay Cape VIII.1985 Collin R. Owen; Bantodemus lethaeus Muls. & Rey det. Ferrer".

Distribution (fig. 27)

Republic of South Africa (Cape Province: Gordons Bay Cape).

### Atrocrates montiscedri Koch, 1956

(figs 86-92, 119)

Atrocrates montis-cedri Koch, 1956: 436.

Locus typicus

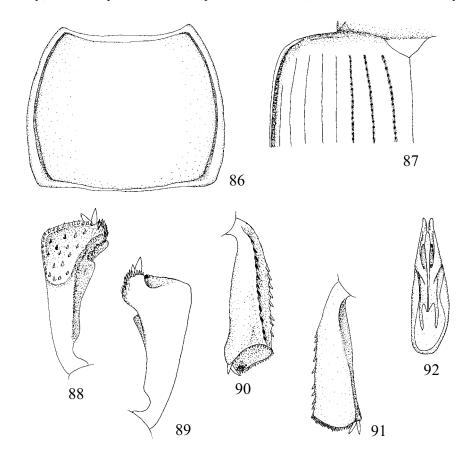
Cedar Bergen (Republic of South Africa: Cape Province).

### DIAGNOSIS

A. montiscedri is close to bisinuatus, ordinarius and platyderus, due to the pronotal shape (sides rounded), structure of the male fore tibia (with denticles on inner side) and mid tibia (with an apical denticle). The species is easily separated from the species just named by the shape of elytral humeri (rounded, not protruding outwards in montiscedri).

### DESCRIPTION

Body length 11.5-14.4 mm, pl/pb = 0.67-0.69, el/eb = 1.23-1.33, el/pl = 1.90-2.10, eb/pb = 1.05-1.08. Upperside of body mat, with a greasy sheen; head, pronotum and intervals sparsely and delicately punctate. Body underside slightly shiny; middle of prosternum and episternum smooth, with delicate wrinkles. Eye



86-92. Atrocrates montiscedri: 86 – pronotum; 87 – anterior part of elytron; 88 – ventral and 89 – dorsal view of male fore tibia; 90 – latero-ventral and 91 – dorsal view of male mid tibia; 92 – ventral view of aedeagus

with 1-2 facets between gena and tempus. Antennal segment 3 ca. 2.4-2.5 x longer than segment 2. Pronotum as in fig. 86, disc slightly convex, with longitudinal concavity along lateral borders; sides rounded, widest near basal 1/3, narrowed anteriad; anterior angles not produced anteriad, rounded; posterior angles rounded, not produced posteriad; pronotum base straight; lateral border

convex, as wide as antennal segment 3. Scutellum wide, distance between humeral angle and scutellum ca. 2.6-2.7 x scutellum width. Anterior part of elytron as in fig. 87. Lower edge of elytral base very poorly convex; upper edge smooth, moderately convex; humeral angle rounded, *not* protruding outwards. Elytral intervals almost flat; striae punctato-sulcate, slightly incised, punctures very small but well visible. Upper margin of elytral epipleura well visible in apical part, but disappearing just before apex, epipleura located dorsally. Male fore and mid tarsi widened, glabrous gutters on underside of tarsi according to the formula: ft absent, 4 mt, 1-3 ht. Male fore tibia with a straight, moderately large denticle on inner side (figs 88-89); inner margin of male mid tibia with an apical denticle (figs 90-91); outer margin of hind tibia of both sexes smooth, without longitudinal ridges. Aedeagus (fig. 92): lap/lbp/ll = 1.0/1.8/0.5; ovipositor: lp/lc1 = 3.8, bc1/lc1 = 2.5, c1/c2/c3/c4/c4-c3 = 1.0/1.3/1.1/1.5/0.4.

TYPE

Holotype (male), TM: "Holotypus, *Atrocrates montis-cedri* sp. n., C. Koch; Cedar Bergen, Jan. 1930, K. H. Bernard".

MATERIAL EXAMINED

Z. A. 99, Seder Berg, 500-1100m, Clanwilliam distr. C.P.; Humus under bushes and large stones, 1. V. 1962, N. LELEUP (TM) 3 m, 3 f.

DISTRIBUTION (fig. 119)

Republic of South Africa (Cape Province: Clanwilliam).

### Atrocrates occultator sp. nov.

(figs 78-85, 119)

NAME DERIVATION

Latin adjective, occultator: occult.

Locus typicus

Gans Bay, Cape Colony (South Africa: Cape Province).

Diagnosis

See diagnosis of A. podagricus.

DESCRIPTION

Body length 16.0 mm, pl/pb = 0.70, el/eb = 1.32, el/pl = 1.92, eb/pb = 1.01. Upperside of body mat, with a greasy sheen, elytra shiny; head sparsely and delicately punctate, pronotum and elytral intervals smooth. Underside of body slightly shiny; prosternum and episternum with delicate puncturation. Mid part of

mentum wide, subparallel, lateral wings narrow (fig. 78). Hypostoma simple. Eye with 2 facets visible between gena and tempus. Antennal segment 3 ca. 3.3 x longer than segment 2. Pronotum as in fig. 80, disc slightly convex, with longitudinal concavity along lateral border; sides rounded; widest at 1/2 length from base, narrowed anteriad; anterior angles produced anteriad, rounded; posterior angles rounded, not produced posteriad; pronotal base straight; lateral border convex and narrow, 0.63 x wider than antennal segment 3. Scutellum wide, distance between humeral angle and scutellum ca. 2.8 x scutellum width. Anterior part of elytron as in fig. 79. Lower edge of elytral base not protruding anteriad, upper edge obtuse; humeral angles rounded, not protruding outwards. Elytral intervals flat, with transverse impressions; striae strongly incised, punctatosulcate, punctures irregular. Upper margin of elytral epipleura well visible in apical part, epipleura located dorsally. Prosternal process protruding towards mesosternum. Male fore and mid tarsi strongly widened, glabrous gutters on the underside of tarsi according to the formula: ft absent, 4 mt, 1-3 ht. Male fore tibia with apical and basal denticles on inner side (figs 81, 82); outer margin of mid tibia as in figs 83, 84; inner margin of hind tibia with row of setae (fig. 85). Aedeagus: lap/lbp/ll = 1.0/2.0/0.4.

Types

Holotype (male), JFC: "Gans Bay, Cape Colony H. Skoog; Atrocrates simius Muls.".

DISTRIBUTION (fig. 119)

Republic of South Africa (Cape Province: Cape Town).

### Atrocrates ordinarius sp. nov.

(figs 93-101, 119)

NAME DERIVATION

Latin adjective, ordinarius: ordinary.

Locus typicus

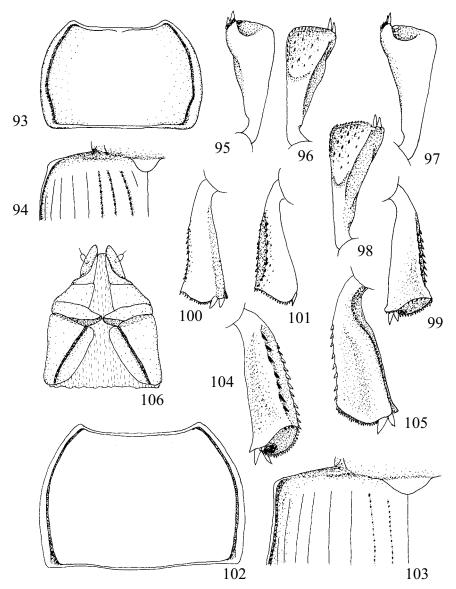
De Hoop Nature Reserve near Bredasdorp (Republic of South Africa: Cape Province).

DIAGNOSIS

The structure of the pronotum (slightly rounded sides, almost straight base) and the absence of denticle on the inner margin of male fore tibia place *ordinarius* close to *dentatus*. The species differ in the structure of their male tarsi.

### DESCRIPTION

Body length 11.5.0-14.0 mm, pl/pb = 0.66-0.72, el/eb = 1.25-1.47, el/pl = 1.95-2.23, eb/pb = 0.98-1.07. Upperside of body mat, with a greasy sheen; head sparsely and delicately punctate, pronotum and intervals smooth, punctures



93-101. Atrocrates ordinarius; 102-103. A. oweni; 104-106. A. splendidus: 93, 102 – pronotum; 94, 103 – anterior part of elytron; 95, 97 – dorsal and 96, 98 – ventral view of male fore tibia; 99 – ventral, 100, 105 – dorsal, 101 – latero-dorsal and 104 – latero-ventral view of male mid tibia; 106 – ovipositor

invisible. Underside of body slightly shiny; prosternum smooth, episternum with delicate wrinkles. Eye with 3-4 facets visible between gena and tempus. Antennal segment 3 ca. 2.1-2.4 x longer than segment 2. Pronotum as in fig. 93, disc moderately convex, with longitudinal concavity along lateral borders; sides rounded, widest at 1/3 length from base, narrowed anteriad; anterior angles not produced anteriad, rounded; posterior angles rounded, not produced posteriad; pronotum base straight or weakly arcuate; lateral border convex, 1.1 x wider than antennal segment 3. Scutellum wide, distance between humeral angle and scutellum ca. 2.8-2.9 x scutellum width. Anterior part of elytron as in fig. 94. Lower edge of base of elytra poorly convex, upper edge obtuse, moderately convex; humeral angles straight, somewhat directed posteriad, protruding outwards. Elytral intervals practically flat; striae punctato-sulcate, punctures small but well visible. Upper margin of elytral epipleura well visible in apical part, epipleura located dorsally. Male fore tarsi widened, glabrous gutters on the underside of tarsi according to the formula: 4 ft, 1-4 mt, 1-3 ht. Male fore tibia evenly widened apically, with a longitudinal concavity and median ridge on inner margin (varied in size, figs 95-98); inner margin of male mid tibia with a small apical denticle, outer margin with two evenly convex ridges (figs 100, 101); hind tibia without longitudinal ridges on outer margin. Aedeagus: lap/lbp/ll = 1.0/2.1/0.4; ovipositor: lp/lc1 = 3.1, bc1/lc1 = 2.5, c1/c2/c3/c4/c4-c3 = 1.0/1.4/1.6/1.9/0.1.

Types

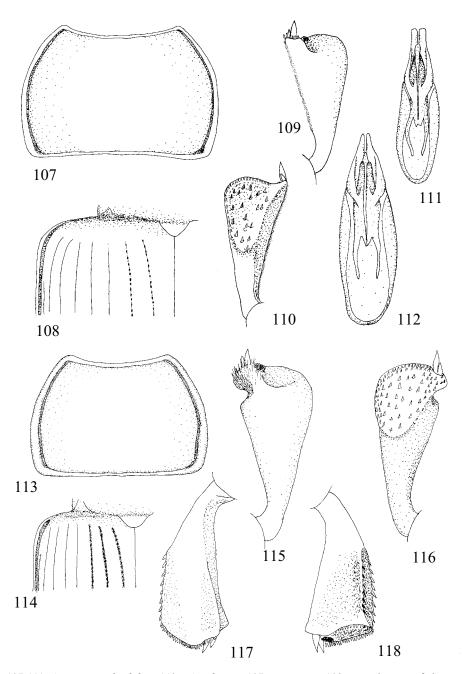
Holotype (male), MZLU: "RSA: Cape Prov. De Hoop Nature Reserve 0-200m 34° 27'S, 20° 25'E 10-13.X.1994. loc.12 leg. R. Danielsson".

Paratypes: *Trigonopus marginatus*; Museum Paris 1935 Coll. M. Sedillot, (MNHN) 1 m; Cap.b. Esp.; Ex-Museo Mniszech; coll. R. Oberthür ex coll. Deyrolle, (MNHN) 1 m, 1 f; Cafraria; *Trigonopus*; Museum Paris 1906 Coll. Léon Fairmaire, (MNHN) 2 m; Caffraria; coll. R. Oberthür ex coll. Deyrolle, (MNHN) 1 f; S. Afr. Cape Prov. 20 miles SE Swellendam 3.I.51. No.110; Swedish South Africa Expedition 1950-1951 Brinck-Rudebeck; *Melanopterus marginicollis* Mulsant; (JFC) 1 f; Cafrerie; Cap.B.Sp. (MHNG) 1 f; Cap.b. sp.; coll. R. Oberthür ex coll. Deyrolle, (MNHN) 1 m, 1 f; M. Wien; Cap. B. spei.; *Platyderus* Muls.; Naturhistoriska Riksmuseet Stockholm Loan no 1229/95, (ZMS) 1 m; RSA: Cape Prov. De Hoop Nature Reserve 0-200m 34 27»S 20 25»E 10-13.X.1994. loc.12 leg. R. Danielsson, (MZLU) 1 f; Museum Paris, coll. De Marseul 1890, *Trigonopus*, Cap., *latemarginatus*, (MNHN) 3 m, 4 f; Cape, Swellendam, 9-10.10.1976, H. Geertsema, (TM) 1 f.

DISTRIBUTION (fig. 119)

Republic of South Africa (Cape Province: Swellendam, Bredasdorp).

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107-111. Atrocrates splendidus; 112 - A. robustus: 107 - pronotum; 108 - anterior part of elytron;
109 - dorsal and 110 - ventral view of male fore tibia; 111, 112 - ventral view of aedeagus; 113118. Atrocrates robustus: 113 - pronotum; 114 - apical part of elytron; 115 - dorsal and 116 - ventral view of male fore tibia; 117 - dorsal and latero-ventral view of male mid tibia

### Atrocrates oweni sp. nov.

(figs 102-103, 119)

NAME DERIVATION

In honour of Colin R. OWEN, collector of the type specimens.

Locus typicus

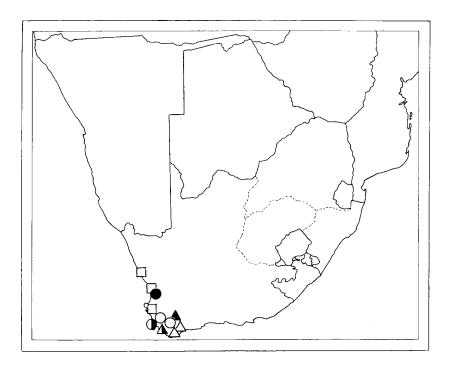
Matroosberg (Republic of South Africa: Cape Province).

Diagnosis

See diagnosis A. splendidus.

### DESCRIPTION

Body length 12.8-13.1 mm, pl/pb = 0.65-0.67, el/eb = 1.32-1.38, el/pl = 2.14-2.29, eb/pb = 1.07. Upperside of body mat, with a greasy sheen; head sparsely and delicately punctate, pronotum and intervals practically smooth, punctures extremely small. Body underside slightly shiny; middle of prosternum delicately punctate, densely and coarsely on sides, episternum smooth with longitudinal



119. Distribution of Atrocrates largus (open circle), A. montiscedri (solid circle), A. occultator (solid/open circle), A. ordinarius (open triangle), A. oweni (solid triangle), A. peringueyi (solid/open triangle) and A. pliskoae (open square)

wrinkles. Eye with 2 facets between gena and tempus. Antennal segment 3 ca. 2.2-2.3 x longer than segment 2. Pronotum as in fig. 102, disc almost flat, without shallow longitudinal concavity along lateral borders; sides rounded, widest near basal 1/2, narrowed anteriad; anterior angles not produced anteriad, rounded; posterior angles rounded, not produced posteriad; pronotal base weakly bisinuate; lateral border flat, as wide as antennal segment 3. Scutellum wide, distance between humeral angle and scutellum ca. 2.6-2.7 x scutellum width. Anterior part of elytron as in fig. 103. Lower edge of elytral base very poorly convex; upper edge obtuse; humeral angle rectangular, protruding outwards. Elytral intervals flat; striae almost punctate, punctures very small. Upper margin of elytral epipleura well visible in apical part, epipleura located dorsally. Outer margin of hind tibia obtuse, without longitudinal ridges. Ovipositor: lp/lc1 = 4.4, bc1/lc1 = 3.8, c1/c2/c3/c4/c4-c3 = 1.0/2.0/1.6/2.2//0.4.

Types

Holotype (female), JFC: "Matroosberg, Cape, 19.I.1996, Colin R. Owen". Paratype: Matroosberg, Cape, 19.I.1996, Colin R. Owen, (JFC) 1 f.

Distribution (fig. 119)

Republic of South Africa (Cape Province: Swartberg).

## Atrocrates peringueyi Koch, 1956 (figs 119-123)

Atrocrates peringueyi Koch, 1956: 437.

Locus typicus

Caledon (Republic of South Africa: Cape Province).

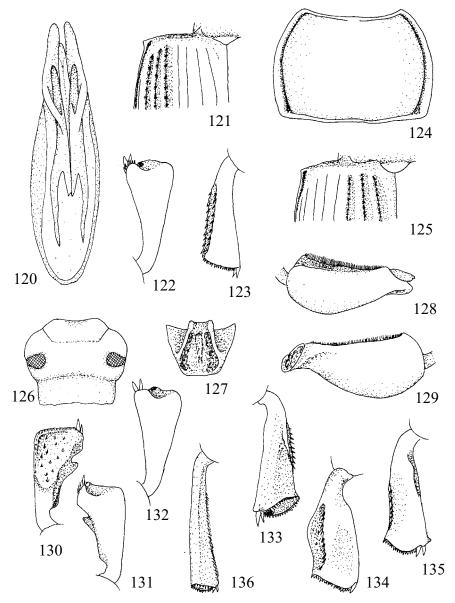
DIAGNOSIS

See diagnosis of largus.

DESCRIPTION

Body length 8.4-10.5 mm, pl/pb = 0.66-0.69, el/eb = 1.14-1.36, el/pl = 2.05-2.15, eb/pb = 1.03-1.21. Upperside of body slightly shiny, with a greasy sheen; head and pronotum sparsely and delicately punctate, elytral intervals smooth. Underside of body shiny; prosternum sparsely and distinctly punctate, episternum with longitudinal wrinkles. Eye with 3-4 facets visible between gena and tempus. Antennal segment 3 ca. 2.2-2.3 x longer than segment 2. Pronotum flattened, between disc and lateral border a strong incision in the form of a narrow groove; sides rounded; widest at 1/2 length from base, narrowed anteriad; anterior angles produced anteriad, rounded; posterior angles rounded, not pro-

duced posteriad; pronotal base straight; lateral border wide, ca 1.4 wider than antennal segment 3. Scutellum wide, distance between humeral angle and scutel-



120-123. Atrocrates peringueyi; 124-136. A. platyderus: 120 – ventral view of aedeagus; 121, 125 – anterior part of elytron; 122, 131 – dorsal and 130 – ventral view of male fore tibia; 123, 134 – latero-dorsal, 133 – latero-ventral and 135 – ventral view of male mid tibia; 124 – pronotum; 126 – head; 127 – mentum; 128 – dorsal and 129 – ventral view of male fore femur; 132 – dorsal view of female fore tibia; 136 – ventral view of male hind tibia

lum ca. 2.5-2.7 x scutellum width. Anterior part of elytron as in fig. 121. Lower edge of elytral base protruding anteriad, upper edge obtuse, slightly convex; humeral angles straight, protruding outwards. Elytral intervals slightly convex; striae strongly incised, punctato-sulcate, punctures well visible. Upper margin of elytral epipleura not visible in apical part, epipleura located dorsally. Male fore and mid tarsi narrow, glabrous gutters on the underside of tarsi according to the formula: 1-4 ft, 1-4 mt, 1-3 ht. Male fore and mid tibiae simple, without denticle on inner side (figs 122, 123); outer margin of hind tibia obtuse, without longitudinal ridges. Aedeagus (fig. 120): lap/lbp/ll = 1.0/2.8/0.5; ovipositor: lp/lc1 = 3.2, bc1/lc1 = 1.94, c1/c2/c3/c4/c4-c3 = 1.0/1.2/1.1/1.5/0.3.

TYPE

Paratype: Atrocrates peringueyi, Paratypus, Caledon, L. Péringuey, 1905, (TM) 1 m.

MATERIAL EXAMINED

Caledon, L. Péringuey, 1905; SAM-COL-A0, (SAM) 7 m, 2 f; S. Afr. Cape Prov. Viljoenspas 5 miles NNE Grabouw. 8.VII.51 No.355; Swedish South Africa Expedition 1950-1951 Brinck-Rudebeck, (JFC) 1 f.

Distribution (fig. 119)

Republic of South Africa (Cape Province: Caledon, Grabouw).

# Atrocrates platyderus (Mulsant et Rey, 1853)

(figs 70, 124-142)

Trigonopus platyderus Mulsant et Rey, 1853: 28; Gemminger et Harold 1870: 1911; Gebien 1910: 272; 1938: 292.

Atrocrates platyderus: Koch 1956: 84.

TERRA TYPICA

"Africa".

#### DIAGNOSIS

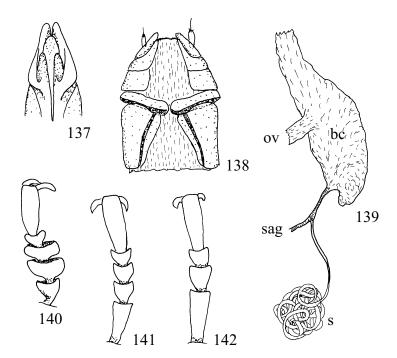
A. platyderus is related to bisinuatus, bredasdorpensis, ordinarius and montiscedri, due to the pronotal shape (sides rounded), structure of the male fore tibia (with denticles on inner side) and mid tibia (with an apical denticle). The structure of outer margin of male mid tibia distinguishes platyderus from the above-mentioned species and places it close to sinuosus and pliskoae.

The species differs from *sinuosus* in the shape of the head (less widened anterior to eyes in *platyderus*), and from *pliskoae* in the structure of hind tibia (outer margin obtuse, without longitudinal ridges in *platyderus*). The pronotal

shape (slightly rounded sides, posterior angles not produced posteriad) distinguishes *platyderus* from both *sinuosus* and *pliskoae*.

## DESCRIPTION

Body length 10.5-14.0 mm, pl/pb = 0.66-0.72, el/eb = 1.39-1.47 (elytra much elongate, body slender), el/pl = 1.92-2.19, eb/pb = 0.97-1.00. Upperside of body mat, with a greasy sheen; head and pronotum sparsely and delicately punctate, intervals smooth, punctures invisible. Underside of body slightly shiny; prosternum and episternum smooth, with longitudinal wrinkles. Mid part of mentum fairly elongate, apically narrowed (fig. 127). Head as in fig. 126. Eye with 3-4 facets visible between gena and tempus. Antennal segment 3 ca. 2.4 x longer than segment 2. Pronotum as in fig. 124, disc slightly convex, with shallow longitudinal concavity along lateral borders; sides rounded, widest near basal 1/2, narrowed anteriad; anterior angles not produced; posterior angles obtuse; lateral border convex, 1.25 x wider than antennal segment 3. Pronotal base wider than elytral base, slightly bisinuate. Scutellum wide, distance between humeral angle and scutellum ca. 3.1-3.3 x scutellum width. Anterior part of elytron as in fig. 125. Lower edge of elytral base weakly convex, upper edge smooth and moderately convex; humeral angles sharp, directed posteriad, protruding outwards.



137-142. Atrocrates platyderus: 137 – aedeagus, ventral view of apical part; 138 – ovipositor; 139 – internal female genitalia (bc – bursa copulatrix, ov – oviduct, sag – spermathecal accessory gland, s – spermatheca); 140 – fore, 141 – mid and 142 – hind male tarsus, dorsal view

Elytral intervals moderately convex; striae punctato-sulcate, punctures medium-sized, well visible. Upper margin of elytral epipleura in apical part visible, epipleura dorsally located. Male fore tarsi expanded (fig. 140), mid and hind tarsi as in figs 141, 142; glabrous gutters on the underside of tarsi according to the formula: 4 ft, 1-4 mt, 1-3 ht. Male fore tibia with a sharp, strongly produced denticle on inner margin (figs 130, 131); mid tibia with arcuately convex inner ridge (one of two double ridges located on inner side) and with apical denticle on inner side (figs 133-135); male hind tibia as in fig. 136; male fore femur as in figs 128, 129; female fore tibia as in fig. 132. Aedeagus (fig. 137): lap/lbp/ll = 1.0/2.3/0.5; ovipositor (fig. 138): lp/lc1 = 5.0, bc1/lc1 = 3.9, c1/c2/c3/c4/c4-c3 = 1.0/1.7/2.8/2.2/0.2, internal female genitalia as in fig. 139.

Type

Holotype (male), MNHN: "Museum Paris; Trigonopus platyderus".

MATERIAL EXAMINED

Mossel Bay 1910; Sam-Col-AO 11886, (SAM) 1 m, 1 f; Houw Hock; Sam-Col- AO 11887; Sam-Col-AO 12176; *Atrocrates indubius* Koch C. Koch det, (SAM) 6 m, 6 f; Caffraria; coll. R. Oberthür ex coll. Deyrolle, (MNHN) 4 m, 3 f; Karow, Castelnau; coll. R. Oberthür ex coll. Deyrolle, (MNHN) 1 m; Cafrerie, Castelnau; coll. R. Oberthür ex coll. Deyrolle, (MNHN) 1 f; Sutherland Cape 7.XI.1993; leg. Colin R. Owen, (JFC) 1 m, 1 f; *Trigonopus spinipes* Mu Cap.b.sp.; Museum Paris 1906 Coll. Léon Fairmaire; (MNHN) 1 m; Cap. B. Spei.; Tarnier; Naturhistoriska Riksmuseet Stockholm Loan no 1220/95, (ZMS) 1 f; Howstock Caledon; *Trigonopus* no.4; Sam-Col-AO 11887, (SAM) 1 f; *Trigonopus*; C.B.sp.; Museum Paris Coll. De Marseul 1890, (MNHN) 3 m, 4 f; S. Afr., S. W. Cape, Heuningnes Riv., 34°42S – 20°02 E, (TM) 2 m.

DISTRIBUTION (fig. 70)

Republic of South Africa (Cape Province: Caledon, George, Mossel Bay, Sutherland).

# Atrocrates pliskoae sp. nov.

(figs 119, 155-162)

NAME DERIVATION

In honour of Dr Jadwiga Danuta PLISKO from Natal Museum, Pietermaritzburg, Republic of South Africa.

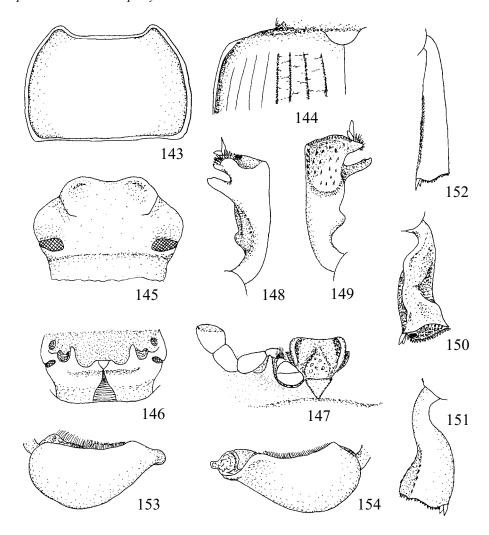
Locus typicus

Darling (Republic of South Africa: Cape Province).

## Diagnosis

The species resembles *platyderus* and *sinuosus* in the structure of its fore and mid tibiae. *A. pliskoae* differs from *platyderus* in the shape of pronotum (strongly widened at base, posterior angles produced posteriad) and from *sinuosus* in the inner side of mid male tibia (with apical denticle in *pliskoae*, preapical in *sinuosus*).

The presence of longitudinal ridges on the outer margin of hind distinguishes *pliskoae* from both *platyderus* and *sinuosus*.



143-154. Atrocrates podagricus: 143 – pronotum; 144 – anterior part of elytron; 145 – head; 146 – ventral view of head with hypostoma; 147 – mentum with part of maxilla; 148 – dorsal and 149 – ventral view of male fore tibia; 150 – ventral and 151 – latero-dorsal view of male mid tibia; 152 – ventral view of male hind tibia; 153 – dorsal and 154- ventral view of male fore femur

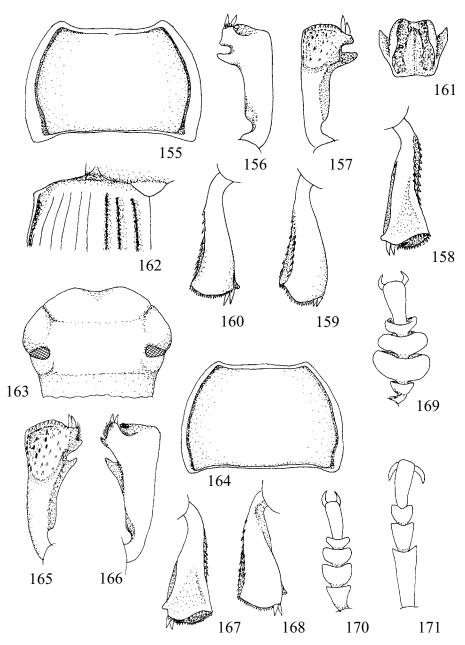
DESCRIPTION

Body length 10.5-14.2 mm, pl/pb = 0.61-0.64, el/eb = 1.24-1.35, el/pl = 1.95-2.16, eb/pb = 0.98-1.04. Upperside of body mat, with a greasy sheen, elytra slightly shiny; head sparsely and delicately punctate, pronotum and intervals smooth, punctures invisible. Underside of body shiny: prosternum smooth, episternum with longitudinal wrinkles. Mentum as in fig. 161. Eye with 3-4 facets visible between gena and tempus. Antennal segment 3 ca. 3.4x longer than segment 2. Pronotum as in fig. 155, disc slightly convex, with longitudinal concavity along lateral borders; sides rounded; pronotum widest at base, gradually narrowed anteriad; anterior angles not produced anteriad, rounded; posterior angles rounded, produced posteriad; base bisinuately emarginate; lateral border 1.40 x wider than antennal segment 3 (at base 2.5 x). Base of pronotum wider than elytral base. Scutellum moderately wide, distance between humeral angle and scutellum ca. 3.1-3.3 x scutellum width. Anterior part of elytron as in fig. 162. Lower edge of elytral base poorly convex, upper margin obtuse, rather moderately convex; humeral angles straight, directed sharply posteriad, protruding outwards. Elytral intervals slightly convex; striae almost sulcate, strongly incised, punctures practically invisible. Upper margin of elytral epipleura in apical part disappearing, invisible. Male fore and mid tarsi distinctly widened, glabrous gutters on the underside of tarsi according to the formula: ft absent, 4 mt, 1-3 ht. Male fore tibia hammer-shaped, with a sharp, strongly produced denticle on inner margin (figs 156, 157); mid tibia with an arcuately convex inner ridge (one of two longitudinal ridges on outer side of tibia), inner side with apical denticle (figs 158-160); outer margin of hind tibia of both sexes with two longitudinal ridges. Aedeagus: lap/lbp/ll = 1.0/2.0/0.4; ovipositor: lp/lc1 = 3.7, bc1/lc1 = 2.8, c1/c2/c3/c4/c4-c3 = 1.0/0.7/1.5/2.1/0.1.

Types

Holotype (male) SAM: "Darling C.C. 1905, L. Peringuey; Sam-Col-AO". Paratypes: Darling C.C. 1905 L. Peringuey; Sam-Col-AO, (SAM) 1 m, 1 f; Cap.b. Esp.; Ex-Museo Mniszech; coll. R. Oberthür ex coll. Deyrolle, (MNHN) 1 f; Saldanha B. Sept. 1912 L. P.; Sam-Col.-AO, (SAM) 2 m, 1 f; S. Afr., Namaqualand, Kotzesrus, 30.57S – 17.50E; 23.8.1979: E-Y: 1582, groundtraps, 62 days, leg. Endrödy-Younga, (TM) 1 m; S. Afr., Namaqualand, Waterval Farm, 31.03S – 17.46E; 25.8.1979: E-Y: 1598, groundtraps, 63 days, leg. Endrödy-Younga, groundtraps with ferm. banana bait, (TM) 1 f; S. Afr., Cape Lambertsbay N, 32.04S – 18.19E; 24.8.1981: E-Y: 1842, day, white sand, leg. Endrödy-Younga, (TM) 1 f; S. Afr., Namaq. Cost Gemsbok Vlakte Farm, 30.30S – 17.25E; 2.9.1977: E-Y: 1370, groundtraps, 56 days, leg. Endrödy-Younga, (TM) 1 f; S. Afr., Cape Geelbek Forestry, 33.12S – 18.08E; 24.8.1983: E-Y: 1974, sandy hill night, leg. Endrödy-Younga, (TM) 1 f; S. Afr., Cape Geelbek Forestry, 33.12S – 18.08E; 1.11.1983: E-Y: 2040, sandy hill night, leg. Endrödy-Younga, (TM) 1 f.

DISTRIBUTION (fig. 119)
Republic of South Africa (Namaqualand, W Cape Province).



155-162. Atrocrates pliskoae; 163-171. A. sinuosus: 155, 164 – pronotum; 156, 166 – dorsal and 157, 165 – ventral view of male fore tibia; 158, 167 – ventral, 159 – latero-dorsal and 160, 168 – dorsal view of male mid tibia; 161 - mentum; 162 – anterior part of elytron; 163 – head; 169 – fore, 170 – mid and 171 – hind male tarsus, dorsal view

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## Atrocrates podagricus (Koch, 1956) comb. nov.

(figs 143-154, 185)

Melanopterus podagricus Koch, 1956: 443.

#### Locus typicus

Hermanus (Republic of South Africa: Cape Province).

## DIAGNOSIS

A. podagricus is close to occultator in the structure of the mentum (widened mid part), the pronotum and elytral humeri (rounded, not protruding outwards); the species differ in the structure of male fore and mid tibiae. The shape of the mid tibia places podagricus close to metasimius, simius, libidinosus and formosus. A. podagricus is easily separated from the species of Atrocrates by the structure of the hypostoma (with a process near maxillary articulation).

#### DESCRIPTION

Body length 15.5-17.0 mm, pl/pb = 0.64-0.71, el/eb = 1.23-1.29, el/pl = 1.73-1.292.15, pronotum wider than elytra in male (eb/pb = 0.99), elytra wider than pronotum in female (eb/pb = 1.07-1.08). Upperside of body mat, with a greasy sheen, elytra shiny; head sparsely and delicately punctate, pronotum and elytral intervals smooth. Underside of body slightly shiny; prosternum and episternum with delicate puncturation. Head as in fig. 145. Mid part of mentum strongly widened, lateral wings narrow, practically invisible (fig 147). Hypostoma with a process near maxillary articulation (fig. 146). Eye with 1-2 facets visible between gena and tempus. Antennal segment 3 ca. 2.2-2.3 x longer than segment 2. Pronotum as in fig. 143, disc slightly convex, with longitudinal concavity along lateral border; sides rounded; widest at 1/2 length from base, narrowed anteriad; anterior angles produced anteriad, rounded; posterior angles rounded, not produced posteriad; pronotal base straight; lateral border convex and narrow, 0.83 x wider than antennal segment 3. Scutellum wide, distance between humeral angle and scutellum ca. 2.3-2.4 x scutellum width. Anterior part of elytron as in fig. 144. Lower edge of elytral base not protruding anteriad, upper edge obtuse; humeral angles rounded, not protruding outwards. Elytral intervals flat, with transverse impressions; striae strongly incised, almost sulcate, punctures small, practically invisible. Upper margin of elytral epipleura not visible in apical part, epipleura located dorsally. Prosternal process obtuse. Male fore and mid tarsi strongly widened, glabrous gutters on the underside of tarsi according to the formula: ft absent, 4 mt, 1-3 ht. Male fore tibia with apical and basal denticles on inner side (figs 148, 149); outer margin of mid tibia S-like bent (figs 150, 151); inner margin of hind tibia with row of setae (fig. 152); male fore femur as in figs 153, 154. Aedeagus:  $\frac{lap}{lbp}/ll = 1.0/2.4/0.4$ ; ovipositor:  $\frac{lp}{lc1} = 5.4$ ,  $\frac{bc1}{lc1} = 1.0/2.4/0.4$ ; ovipositor:  $\frac{lp}{lc1} = 1.0/2.4/0.4$ 2.5, c1/c2/c3/c4/c4-c3 = 1.0/1.8/1.4/1.9/0.1.

Types

Lectotype (male), SAM: "Caledon Hermanus, Lightfoot 1902; Sam-Col-AO 11883".

Paralectotypes: Caledon Hermanus, Lightfoot 1902; Sam-Col-AO 11883, (SAM) 1 m, 4 f.

## MATERIAL EXAMINED

S. Africa, Cape Prov., Cape Agulhas, 31.XII.50. No.101; Swedish South Africa Expedition 1950-1951 Brinck-Rudebeck; *Atrocrates podagricus* Koch. C. Koch det., (MZLU) 1 m; S. Afrika, Capstadt; *Trigonopus tenebrosus* Muls. det. dr. Kaszab, (TMB) 1 m; Gans Bay, Cape Colony H. Skoog; *podagricus* Koch (*Atrocrates*) det. Julio Ferrer 1986, (JFC) 1 m.

DISTRIBUTION (fig. 185)

Republic of South Africa (Cape Province: Bredasdorp, Caledon, Cape Town).

## Atrocrates robustus sp. nov.

(figs 112-118)

NAME DERIVATION

Latin adjective, robustus: robust.

Locus typicus

Swartberge (Republic of South Africa: Cape Province).

### DIAGNOSIS

A. robustus is close to podagricus and occultator in the structure of elytral humeri (rounded, not protruding outwards); the species differ in the structure of the mentum, male fore and mid tibiae and the pronotum. The shape of the pronotum and convex lateral border place robustus close to platyderus, bisinuatus, bredasdorpensis, ordinarius and montiscedri. A. robustus is easily separated from the species just named by the structure of male fore tibia.

#### DESCRIPTION

Body length 14.2-16.8 mm, pl/pb = 0.64-0.69, el/eb = 1.19-1.25, el/pl = 1.85-2.00, eb/pb = 1.02-1.07. Upperside of body mat, with a greasy sheen; head, pronotum and elytral intervals sparsely and delicately punctate. Underside of body slightly shiny; prosternum and episternum smooth. Eye with 2-3 facets visible between gena and tempus. Antennal segment 3 ca. 2.2-2.3 x longer than segment 2. Pronotum as in fig. 113, disc slightly convex, with longitudinal concavity along lateral border; sides rounded; widest at 1/2 length from base, narrowed anteriad; anterior angles slightly produced anteriad, rounded; posterior

angles rounded, not produced posteriad; pronotal base straight; lateral border convex and very wide, 1.7 x wider than antennal segment 3. Scutellum moderately wide, distance between humeral angle and scutellum ca. 3.2-3.3 x scutellum width. Anterior part of elytron as in fig. 114. Lower edge of elytral base poorly convex, upper edge obtuse; humeral angles rounded, not protruding outwards. Elytral intervals flat; striae strongly incised, almost sulcate, punctures small, practically invisible. Upper margin of elytral epipleura well visible in apical part, epipleura located dorsally. Male fore and mid tarsi strongly widened, glabrous gutters on the underside of tarsi according to the formula: ft absent, 4 mt, 1-3 ht. Male fore tibia with longitudinal concavity and obtuse denticle on inner side (figs 115, 116); mid tibia with apical denticle (figs 117, 118); inner margin of hind tibia without row of setae. Aedeagus with narrow parameres, lap/lbp/ll = 1.0/2.3/0.6 (fig. 112).

**TYPES** 

Holotype (male), TM: "S. Afr., Swartberge, Blesberg-E, 2000m, 23.25S-22.41E; 7.3.1981; E-Y: 1758, singled, night, leg. Endrödy-Younga".

Paratypes: S. Afr., Swartberge, Blesberg-E, 2000m, 23.25S-22.41E; 7.3.1981; E-Y: 1758, singled, night, leg. Endrödy-Younga, (TM) 3 m; S. Afr., Swartberge, Blesberg-E, 2000m, 23.25S-22.41E; 6.3.1981; E-Y: 1755, singled, night, leg. Endrödy-Younga, (TM) 3 m; S. Afr., Swartberge, Blesberg-E, 2000m, 23.25S-22.41E; 5.11.1978; E-Y: 1755, singled, in day, leg. Endrödy-Younga, (TM) 1 m; similis Chev, Cape B E, (MHNG) 1 m.

DISTRIBUTION

Republic of South Africa (Cape Province: Swartberge).

## Atrocrates simius (Mulsant et Rey, 1853)

(figs 172-179, 185)

Trigonopus marginatus var. simius Mulsant et Rey, 1853: 28. Atrocrates simius Mulsant et Rey: Koch 1956: 84.

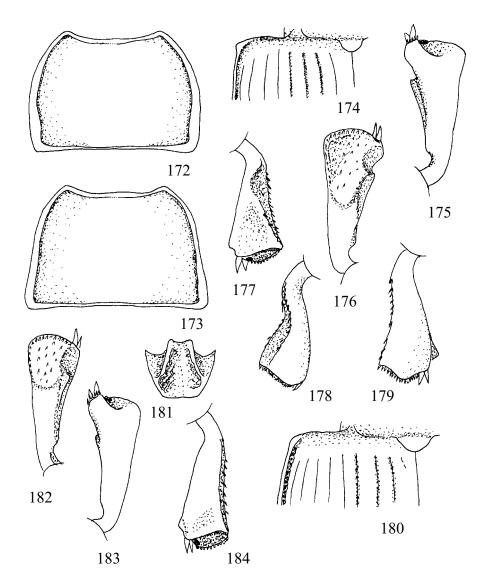
TERRA TYPICA

"Cafrerie" (Republic of South Africa: Cape Province).

## DIAGNOSIS

A. simius is close to metasimius, libidinosus, evestigator and formosus in the trapezoidal pronotal shape, the structure of inner margin of male fore tibia (with apical and basal denticles), and the shape of outer margin of male mid tibia (S-like bent). The inner margin of the male mid tibia with large, preapical denticle distinguishes libidinosus and formosus from evestigator, simius and metasimius. The presence of preapical denticle on the inner side of male mid tibia distin-

guishes *simius* and *evestigator* from *metasimius* (with apical denticle), while the structure of mentum (mid part widened in *evestigator*, narrowed in *simius*), lateral border of pronotum (wide in *evestigator*, moderately wide in *simius*) and the structure of eye distinguish *simius* from *evestigator*.



172-179. Atrocrates simius; 180-184. A. striatus: 172 – male and 173 – female pronotum; 174, 180 – anterior part of elytron; 175, 183 – dorsal and 176, 182 – ventral view of male fore tibia; 177, 184 – ventral, 178 – latero-dorsal and 179 – dorsal view of male mid tibia; 181 – mentum

#### DESCRIPTION

Body length 11.5-15.0 mm, pl/pb = 0.61-0.69, el/eb = 1.23-1.36 (elytra rather wide), el/pl = 1.89-2.20, eb/pb = 0.95-1.07. Upperside of body mat, with a greasy sheen; head sparsely and delicately punctate, pronotum and intervals practically smooth, punctures invisible. Underside of body slightly shiny; prosternum smooth. sides wrinkled, episternum very densely and coarsely punctate, punctures fusing to form wrinkles. Mid part of mentum very strongly narrowed apically. Eye laterally narrowed, 1-2 facets visible between gena and tempus. Antennal segment 3 ca. 2.1 x wider than segment 2. Pronotum slightly convex with longitudinal, shallow concavity along lateral border; in male sides for 2/3 almost parallel (fig. 172), in female widest at base, narrowed anteriad (trapezoidal shape of pronotum) (fig. 173); anterior angles not produced anteriad, rounded; posterior angles rounded; pronotal base arcuate, slightly bisinuately emarginate (more distinctly in females); lateral border rather wide, 1.3 x wider than antennal segment 3. Scutellum relatively small, distance between humeral angle and scutellum ca. 4.6-4.7 x scutellum width. Anterior part of elytron as in fig. 174. Lower edge of elytral base strongly produced anteriad; upper edge obtuse, moderately convex; humeral angles straight, only slightly protruding outwards. Elytral intervals flat, striae clearly incised, almost sulcate, punctures very small, practically invisible. Upper margin of elytral epipleura well visible in apical part, epipleura located dorsally. Male fore and mid tarsi widened, glabrous gutters on the underside of tarsi according to the formula: ft absent, 4 mt, 1-3 ht. Male fore tibia with a large, straight denticle at base of subapical concavity on inner side (figs 175, 176); male mid tibia S-like bent, outer margin with a concavity, inner side with a blunt subapical denticle (figs 177-179). Aedeagus: lap/lbp/ll = 1.0/ 2.3/0.5; ovipositor: 1p/lc1 = 3.6, bc1/lc1 = 2.4, c1/c2/c3/c4/c4-c3 = 1.0/1.6/1.4/1.8/0.1.

#### REMARKS

When describing the genus *Atrocrates*, Koch (1956: 84) listed *simius* Mulsant et Rey as a member of the genus. In the description of *Trigonopus marginatus* Mulsant and Rey (1853: 28) state that in spite of the considerable differences in the structure of male fore and mid legs of the specimen named *T. simius*, they regard it only as a variety of *T. marginatus*. However, they did not include a formal description of *simius* in the genus *Trigonopus*.

The species (*simius* Mulsant et Rey) is absent from the catalogues of Gemminer and Harold (1870) and Gebien (1910, 1938).

### TYPE

Holotype (male) MNHN: "Cafrerie; Museum Paris Coll. De Marseul 1890; t. *marginatus* var. *simius*".

#### MATERIAL EXAMINED

H.W.O. 2.6.; *T. tibialis*; Sam-Col-AO 12184, (SAM) 1 m; Cap.b.sp.; coll. R. OBERTHÜR ex coll. DEYROLLE; Trigonopus marginatus WIEDM C.B.Esp, (MNHN) 5 m, 1 f; C T 2.87.; 108d; Trigonopus libralis Per.; Sam-Col-AO 12182, (SAM) 1 f; CT 2.87.; Sam-Col-AO 12186, 11884, (SAM) 2 f; CT 9.86.; Sam-Col-AO 11885, 12180 d, 12180 c, 12180 b 12180 a, (SAM) 5 m, 1 f; Sam-Col-AO 12179 a,b,c,d, (SAM) 2 m, 2 f; Cap; ex Coll Waagen; Muséum Paris, (MNHN) 1 m; 38; Rondeb 8.4.83; Museum Paris 1906 Coll. Léon FAIRMAIRE, (MNHN) 1 m; Cap b. Esp.; Muséum Paris, (MNHN) 1 m; South Africa Cape Town; Museum Paris Coll. P.Ardoin 1978, (MNHN) 2 m; Reynaud 1829 Cap; Museum Paris Le Cap Reynaud 1829, (MNHN) 1 f; Cap b sp; Muséum Paris 1952 Coll. R.OBERTHÜR; (MNHN) 1 f; Cape Town G. Franch. 09.; Sam-Col-AO 12178, (SAM) 2 m, 2 f; Afrique Delalande; Museum Paris Afrique Australe Delalande, (MNHN) 1 m; Cafrerie; coll. R.OBERTHÜR ex coll. DEYROLLE, (MNHN) 1 f; Cap.; Muséum Paris, (MNHN) 1 m, 1 f; S.Afr. Cape Prov. Cape Peninsula Kirstenbosch 29.X.50. No. 18; Swedish South Africa Expedition 1950-1951 Brinck-Rudebeck; Atrocrates tibialis Koch. det. Julio Ferrer 1985, (MZLU) 1 f; (JFC) 1 m; Gans Bay Cape Colony H.Skoog; *Melanopterus platyderius* Muls. det. Julio Ferrer 1986, (JFC) 1 m, 1 f; 20.XII.1969. Cape Town Afrique Du Sud Cl. Besnard leg. Museum Paris Coll. P. Ardoin 1978; Atrocrates platyderus Mulsant P. Ardoin Det. 1970., (MNHN) 3 m; A. Afr. C.P. Vermont, Pan onrust 15.IV.79. VB whitenead; Sam-Col-AO, (SAM) 2 m, 1 f; Cap. B Spei.; Victorin; Naturhistoriska Riksmuseet Stockholm Loan no 1235/95, (ZMS) 2 f; Cap. B Sp.; Wahlberg; Naturhistoriska Riksmuseet Stockholm, Loan no 1236/95, (ZMS) 1 f; Cap. B Sp; Kinb.; Naturhistoriska Riksmuseet Stockholm, Loan no 1237/95, (ZMS) 1 f; Cap; 234; Mus. Zool. Polonicum Warszawa 12/45, (MIZPAN) 1 f; S.Afr. Cape Prov. Steenbras Dam area 10 miles WSW Grabouw. 4.II.51 No.169; Swedish South Africa Expedition 1950-1951 Brinck-Rudebeck, (JFC) 1 f; Ser hawry's P Purcel, Sam-Col-AO 12185, (SAM) 1 f; CT 287; Sam-Col-AO 11884, (SAM) 2 f; Trigonopus, Cape, Museum Paris, Coll. DE MARSEUL 1890, (MNHN) 2 m.

Distribution (fig. 185)

Republic of South Africa (Cape Province: Cape Town, Rondebosch).

## Atrocrates sinuosus sp. nov.

(figs 163-171, 185)

NAME DERIVATION

Latin adjective, sinuosus: sinuous.

Locus typicus

Royal Natal National Park Tugela Valley (Republic of South Africa: Natal).

#### DIAGNOSIS

Like *platyderus* and *pliskoae*, *sinuosus* has a large denticle on the inner margin of male fore tibia and outer margin of male mid tibia with strongly convex inner ridge. It differs from *platyderus* in the pronotal shape, and from *pliskoae* in the structure of hind tibia. *A. sinuosus* is easily separated from *platyderus* and *pliskoae* by the head strongly widened anterior to eyes and the inner margin of male mid tibia with a preapical denticle.

## DESCRIPTION

Body length 13.5-16.5 mm, pl/pb = 0.64-0.71, el/eb = 1.28-1.36, el/pl = 1.91-2.04, eb/pb = 1.00-1.09. Upperside of body mat, with a greasy sheen; head sparsely and delicately punctate, pronotum and intervals smooth, punctures invisible. Underside of body strongly shiny; prosternum delicately punctate, episternum smooth. Head very strongly, trapezoidal-like widened anterior to eyes (fig. 163); eyes laterally narrowed, between gena and tempus 1-2 facets visible. Antennal segment 3 ca. 2.4x longer than segment 2. Pronotum as in fig. 164, disc slightly convex, with longitudinal concavity along lateral borders; sides rounded, widest at base, gradually narrowing anteriad; anterior angles not produced anteriad, rounded; posterior angles rounded, produced posteriad; pronotum base bisinuately emarginate; lateral border 1.40 x wider than antennal segment 3. Base of pronotum wider than base of elytra. Scutellum medium-sized, distance between humeral angle and scutellum ca. 3.4-3.8 x scutellum width. Lower edge of elytral base poorly convex, not protruding anteriad, upper edge obtuse, moderately convex; humeral angles straight, directed posteriad, protruding outwards. Elytral intervals moderately convex; striae almost sulcate, punctures practically invisible. Upper margin of elytral epipleura in apical part visible, epipleura located dorsally. Male fore and mid tarsi strongly widened (figs 169, 170), hind one as in fig. 171, glabrous gutters on the underside of tarsi according to the formula: ft absent, 4 mt, 1-3 ht. Male fore tibia with a sharp, strongly produced denticle on inner margin (figs 165, 166); outer margin of mid tibia with strongly convex inner ridge (one of two longitudinal ridges), inner side with a preapical denticle (figs 167, 168); outer margin of hind tibiae of both sexes obtuse. Aedeagus: lap/lbp/l1 = 1.0/2.6/0.5; ovipositor: lp/lc1 = 3.6, bc1/lc1 = 2.5, c1/c2/c3/c4/c4-c3 = 1.0/1.7/2.4/1.6/0.1.

## Types

Holotype (male) MZLU: "S. Africa, Natal, Royal Natal National Park Tugela Valley 4.IV.51. No. 261; *Atrocrates spatulipes* Koch".

Paratypes: S. Africa, Natal, Royal Natal National Park Tugela Valley 4.IV.51. No. 261; *Atrocrates spatulipes* Koch, (MZLU) 1 m, 2 f; S.Afr. Cape Prov. Bainskloof 5-10 miles E. Wellington 1.VII.51. No.346; Swedish South Africa Expedition 1950-1951 Brinck-Rudebeck; *Atrocrates spatulipes* Koch. Det. Julio Ferrer 1985, (MZLU) 1 m, 2 f; (JFC) 1 m; Bainskloof (Limietberge) 33 33»S., 19

08»E. Cape R.S.A. 3.Oct.1974.; H21380; Namibian National Insect Collection State Muséum P.O. Box 1203 Windhoek, Namibia, (NNIC) 1 m.

Distribution (fig. 185)

Republic of South Africa (Cape Province: Wellington; Natal: Tugela).

## Atrocrates splendidus sp. nov.

(figs 104-111)

NAME DERIVATION

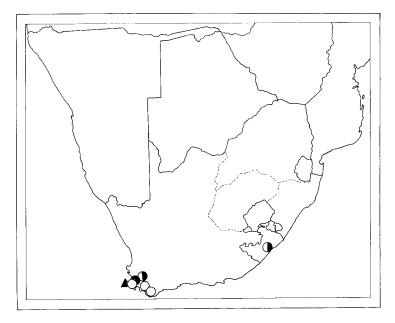
Latin adjective, splendidus: shine.

Locus typicus

Swartberg (Republic of South Africa: Cape Province).

## DIAGNOSIS

A. splendidus is close to oweni, due to the elytral sculpture – striae almost punctate, intervals flat. The species differ in the convexity of pronotal disc near lateral border (with shallow longitudinal concavity in splendidus; practically flat in oweni), and the shape of elytral humeri (rounded, not protruding outwards in splendidus; rectangular, protruding outwards in oweni).



185. Distribution of *Atrocrates podagricus* (open circle), *A. simius* (solid circle), *A. sinuosus* (solid/open circle) and *A. striatus* (solid triangle)

DESCRIPTION

Body length 10.2-11.2 mm, pl/pb = 0.61-0.69, el/eb = 1.28-1.34, el/pl = 1.93-1.932.27, eb/pb = 1.04-1.09. Upperside of body mat, with a greasy sheen; head sparsely and delicately punctate, pronotum and intervals practically smooth, punctures invisible. Body underside slightly shiny; middle of prosternum delicately punctate, episternum smooth with longitudinal wrinkles, sides flattened. Eye with 2-3 facets between gena and tempus. Antennal segment 3 ca. 1.8-1.9 x longer than segment 2. Pronotum as in fig. 107, disc slightly convex, with shallow longitudinal concavity along lateral borders; sides rounded, widest near basal 1/2, narrowed anteriad; anterior angles not produced anteriad, rounded; posterior angles rounded, not produced posteriad; pronotal base straight; lateral border convex, as wide as antennal segment 3. Scutellum wide, distance between humeral angle and scutellum ca. 2.3-2.4 x scutellum width. Lower edge of elytral base very poorly convex; upper edge obtuse; humeral angle widely rounded, not protruding outwards. Elytral intervals flat; striae almost impunctate, punctures very small. Upper margin of elytral epipleura well visible in apical part, epipleura located dorsally. Male fore tarsi widened, glabrous gutters on underside of tarsi according to the formula: 4 ft, 4 mt, 1-3 ht. Male fore tibia without denticle, inner side with longitudinal concavity, and ridge with a row of dense and short erect setae (figs 109, 110); inner margin of male mid tibia with an apical denticle (figs 104, 105); outer margin of hind tibia of both sexes obtuse, without longitudinal ridges. Aedeagus (fig. 111) with apical part (parameres) parallelsided, and sharp lacinia, lap/lbp/ll = 1.0/1.9/0.6; ovipositor (fig. 106): lp/lc1 = 4.3, bc1/lc1 = 3.2, c1/c2/c3/c4/c4-c3 = 1.0/1.7/1.8/2.5/0.5.

Types

Holotype (male), HBC: "South Africa, Kap-Provinz, Swartberg-Pass, 1500m, I.1993, RAUTENSTRAUCH leg., coll H. J. Bremer".

Paratypes: South Africa, Kap-Provinz, Swartberg-Pass, 1500m, I.1993, RAUTENSTRAUCH leg., coll H. J. Bremer, (HBC) 8 m, 14 f; Swartsberg Pass, Cape, 1.IV.85, (JFC) 1 m, 1 f.

DISTRIBUTION

Republic of South Africa (Cape Province: Swartberg).

# Atrocrates striatus (Quensel, 1806)

(figs 180-185)

Platynotus striatus Quensel in: Schoenherr 1806: 142.

Eurynotus striatus Sch.: Dejean 1937: 211.

Trigonopus striatus Quensel: Gemminger et Harold 1870: 1912; Gebien 1910: 272; 1938: 291. Trigonopus marginatus Mulsant et Rey, 1853: 25; Gemminger et Harold 1870: 1912 (as syn.). Atrocrates striatus (Quensel): Koch 1956: 84. TERRA TYPICA

"Cap de Bonne Espérance" (Republic of South Africa).

#### **DIAGNOSIS**

The shape of the pronotum and male fore tibia place *striatus* close to *capensis*, *evestigator*, *parasimius*, *simius*, *libidinosus* and *formosus*. The structure of male mid tibia distinguishes *striatus* and *capensis* from the above mentioned species. *A. striatus* differs from *capensis* in the presence of a preapical denticle on the inner margin of male mid tibia (apical one in *capensis*), and the shape of the elytral base (strongly produced anteriad in *capensis*).

### DESCRIPTION

Body length 11.0-19.0 mm, pl/pb = 0.66-0.68, el/eb = 1.25-1.30 (elytra rather wide), el/pl = 1.98-2.13, eb/pb = 1.03-1.12. Upperside of body mat, with a greasy sheen; head sparsely and delicately punctate, pronotum and intervals practically smooth, punctures invisible. Body underside slightly shiny; prosternum delicately punctate, episternum very densely and coarsely punctate, punctures fused into wrinkles laterally narrowed. Mentum as in fig. 181. Eye with 1-2 facets visible between gena and tempus. Antennal segment 3 ca. 2.1 x longer than segment 2. Pronotum slightly convex, with shallow longitudinal concavity along lateral border; in male sides for 2/3 length almost parallel, in female widest at base, narrowing anteriad (trapezoidal shape of pronotum); anterior angles not produced anteriad, rounded; posterior angles rounded; pronotum base almost straight, slightly bisinuately emarginate (in females more distinctly so); lateral border rather wide, 1.5 x wider than antennal segment 3. Scutellum relatively narrow, distance between humeral angle and scutellum ca. 4.3-4.5 x scutellum width. Anterior part of elytron as in fig. 180. Lower edge of base of elytra poorly produced anteriad, upper edge obtuse, moderately convex; humeral angles straight, practically not protruding outwards. Elytral intervals weakly convex, flattened; striae shallow, almost sulcate, punctures small but well visible. Upper margin of elytral epipleura well visible in apical part, epipleura dorsally located. Male fore and mid tarsi widened, glabrous gutters on the underside of tarsi according to the formula: ft absent, 4 mt, 1-3 ht. Male fore tibia with a small denticle on inner side (figs 182, 183); male mid tibia with a blunt preapical denticle on inner side (fig. 184). Aedeagus:  $\frac{\text{lap}}{\text{lbp}} = 1.0/2.0/0.5$ ; ovipositor:  $\frac{\text{lp}}{\text{lc1}} = 4.5$ ,  $\frac{\text{bc1}}{\text{lc1}} = 2.3$ , c1/c2/c3/c4/c4-c3 = 1.0/1.7/1.5/1.7/0.1.

**TYPES** 

Trigonopus marginatus Mulsant et Rey, 1853.

Lectotype (male), MNHN: "marginatus Type Mulsant; Trigonopus marginatus, Cap bon Sp; Museum Paris, Coll. De Marseul 1890".

Paralectotypes: *Trigonopus marginatus* Wiedeman, Cap bon Sp., Museum Paris, Coll. De Marseul 1890, (MNHN) 1 m; Cap; *Trigonopus marginatus*;

Museum Paris, Coll. De Marseul 1890, (MNHN) 1 f; C.b.Esp.; *Trigonopus marginatus*; Museum Paris, Coll. De Marseul 1890, (MNHN) 1 f (present designation).

#### MATERIAL EXAMINED

Afrique Delalande; Museum Paris, Afrique Australe, Delalande; Trigonopus marginatus, (MNHN) 7 m, 3 f; Caffraria; Museum Paris Coll. De Marseul 1890; Trigonopus marginatus, (MNHN) 1 m; Trigonopus lethaeus 4, 116, Cap.b.Sp.; Museum Paris 1906, Léon FAIRMAIRE; 38; Spt.83, (MNHN) 1 f; Cap. B. Spe.; De Vylder; Naturhistoriska Riksmuseet Stockholm Loan no 1233/95, (ZMS) 1 f; Trigonopus marginatus; Museum Paris 1906 Léon FAIRMAIRE, (MNHN) 1 m; S.Afr. Cape Prov. Cape Town Table Mnt. Blinkwater 4.XI.50. No.23; Swedish South Africa Expedition 1950-1951 Brinck-Rudebeck; (MZLU), 7 m, 4 f; S.Afr. Cape Prov. Cape Town Table Mnt. Alt. 15.X.50. No.10; Swedish South Africa Expedition 1950-1951 Brinck-Rudebeck; 3.400 ft (MZLU), 1 m; Cape; Museum Paris 1906 Léon FAIRMAIRE, (MNHN) 1 m; Cap; Museum Paris, 1906 Léon FAIRMAIRE, (MNHN) 1 f; S.Afr. Cape Prov. Cape Town Table Mnt. Alt. 15.XII.50 No.83; Swedish South Africa Expedition 1950-1951 Brinck-Rudebeck; Alt. 3000 ft.; (MZLU), 1 f; Cap Town Raffray; Museum Paris; Museum Paris Coll. M. Pic., (MNHN) 6 m, 9 f; Blinkwater, Table Mount 5.XI.1949. C.Koch & Andreae; Atrocrates striatus Quensel det. Koch., (JFC) 1 m, 1 f; Sam-Col-AO 11884, (SAM) 1 f; S.Afr. Cape Prov. Cape Peninsula Hour Bay Little Lions Head 13.XII.50. No.81, Swedish South Africa Expedition 1950-1951 Brinck-Rudebeck; Atrocrates tibialis Koch. det Julio Ferrer 1985; (JFC), 1 f; S.Afr. Cape Prov. Cape Peninsula Table Mountain 7.VII.51. No.353; Swedish South Africa Expedition 1950-1951 Brinck-Rudebeck; Atrocrates striatus, (JFC) 1 f; CAP; Coll. Kraatz L. Péringuey det.; 332; Trigonopus striatus; Museum Paris Coll. P. Ardoin 1978, (MNHN) 1 f; Cape Town 30.12.1956 dr. G. Вотто; Sam-Col-AO 11817, (MNHN) 9 m; Cape Town 2.10.1956, 20.I.1957. dr.G.Botto; On lason; Sam-Col-AO 11819, Sam-Col-AO 11818, Sam-Col-AO 11821, (SAM) 3 f; Cape Town 10.4.1957. dr.G.Вотто; Sam-Col-AO 11820, (SAM) 1 f; S.Afr. Cape Prov. Cape Point Nature Reserv. 24.10.50. No.15; Swedish South Africa Expedition 1950-1951 Brinck-Rudebeck; Atrocrates tibialis Koch. C.Koch det.; (MZLU), 4 m; S.Afr. Cape Prov. Cape Peninsula Oude Kraal 20.10.50 No.11; Swedish South Africa Expedition 1950-1951 Brinck-Rudebeck; Atrocrates striatus Quens. det. Julio Ferrer 1985; (JFC) 1 m; 12; Heliophilus exaratus Cap. Bug.; Museum Paris, (MNHN) 1 m; Rep. Südafrica Kap. d.g.Hoffnung 34.20S-18.25E leg.D. BORISCH (Bor) 10/10.91 u.Steinen; (JFC) 1 m; R. Southafr. 10/10/91 Cape of Good Hope 34.20S-18.25E leg. Dietmar Borisch u.stones; (JFC) 1 f; S Afr Du Kaapse WEG GC-100(3) A J Prins Jan 1977; Trigonopus infermus; Sam-Col-AO 11840, (SAM) 3 f; Sam-Col-AO 12177; Atrocrates tibialis Koch C. Koch det., (SAM) 3 m; Sam-Col-AO 12189 (SAM) 1 m; Sam-Col-AO 12187, (SAM) 1 m; Paarl Doddoo; Sam-Col-AO 11814, (SAM) 2 m; Cape Town G.Freuch 09; SamCol-AO 12178, (SAM) 1 m, 4 f; Museum Paris Matébélé Penda-Ma-tenka E.Holub 170-94, (MNHN) 1 m; Museum Paris Env. De Cape Town A. RAFFRAY 1899, (MNHN) 12 m, 2 f; Cap. B. Spei. Schh. Westerm; Atrocrates striatus Muls. det. Julio Ferrer 1985; (JFC), 1 m; Sam-Col-AO 11813, (SAM) 1 m; Cape Town E. Simon 1893; Museum Paris 1906 Coll. L. FAIRMAIRE, (MNHN) 1 m; Cape Robben Isl. 1882; Sam-Col-AO 11816, (SAM) 1 m; Museum Paris Afrique Australe M Bretonnet 1928, (MNHN) 1 m; T. tibialis var.; Sam-Col-AO 11885, (SAM) 1 m; Cape Town; Sam-Col-AO 12183, (SAM) 1 f; Museum Paris 1906 Coll. L. FAIRMAIRE, (MNHN) 1 m; Cap.; Trigonopus striatus Quens H.Gebien det.1939.; Mus. Zool. Polonicum Warszawa 12/45, (MIZPAN) 1 m; Sam-Col-AO 12181, (SAM) 1 f; Port Natal; Trigonopus striatus Quens H.Gebien det. 1939.; Mus. Zool. Polonicum Warszawa 12/45; 1 m; Simoris bay Sept. 62; Museum Paris 1906 Coll. L. FAIRMAIRE, (MNHN) 1 m; Museum Paris C.de B. Esp. Table H.Bretonnet 1888; 724 88, (MNHN) 1 m; S. Afr. Cape Prov. Cape Peninsula Oudee Kraal 20.X.50. No. 11; Swedish South Africa Expedition 1950-1951 Brinck-Rudebeck; Atrocrates tibialis Koch C.Koch det, (MZLU) 4 m; (JFC) 1 m; 46; Goudot Museum Paris Le Cap Goudot 4178-34, (MNHN) 1 f; Sam-Col-AO 11813, (SAM) 1 m; Sam-Col-AO 11815, (SAM) 1 f; S.Afr. Cape Prov. Cape Peninsula Table Mnt. Blinkwater Ravine 5.VII.51. No. 351; Swedish South Africa Expedition 1950-1951 Brinck-Rudebeck; Alt. 600 ft.; (MZLU), 1 m; Sam-Col-AO 12188, (SAM) 1 m; Museum Paris; Museum Paris 1906 Coll. Léon FAIRMAIRE, (MNHN) 1 f; Museum Paris, (MNHN) 1 f; Bulawayo (Rhodesia); G.B. Mai 1913; Muséum Paris, (MNHN) 2 f.

DISTRIBUTION (fig. 185)
Republic of South Africa (Cape Province: Cape Town).

### LIST OF THE SPECIES OF THE GENUS ATROCRATES

Atrocrates bisinuatus Koch, 1956

- A. bredasdorpensis sp. nov.
- A. capensis sp. nov.
- A. dentatus sp. nov.
- A. endrodyi sp. nov.
- A. evestigator sp. nov.
- A. formosus sp. nov.
- A. garbarczyki sp. nov.
- A. largus sp. nov.
- A. latemarginatus (Mulsant et Rey, 1853)
- A. libidinosus sp. nov
- A. metasimius sp. nov.
- A. montiscedri Koch, 1956

- A. occultator sp. nov.
- A. ordinarius sp. nov.
- A. oweni sp. nov.
- A. peringueyi Koch, 1956
- A. platyderus (Mulsant et Rey, 1853)
- A. pliskoae sp. nov.
- A. podagricus (Koch, 1956) comb. nov.
- A. robustus sp. nov.
- A. simius (Mulsant et Rey, 1853)
- A. sinuosus sp. nov.
- A. splendidus sp. nov.
- A. striatus (Quensel, 1806)

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